

**FINAL  
REMEDIAL ACTION PLAN/RECORD OF DECISION  
NO ACTION IRP SITES 5, 7, 11, AND 12  
NAVAL STATION SAN DIEGO  
SAN DIEGO, CALIFORNIA**

**December 2004**

10/10/04  
10/10/04  
10/10/04

**DTSC**

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**CYPRESS**

## DECLARATION





## DECLARATION

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### SITE NAMES AND LOCATION

Naval Station San Diego

Installation Restoration Program (IRP) sites:

5 – Admiral Baker Golf Course Landscaping-Debris Landfill

7 – Former Sewage Treatment Plant

11 – French Drain

12 – Brinser Street Parking Area

San Diego, California 92136

### STATEMENT OF BASIS AND PURPOSE

This No Action Remedial Action Plan (RAP)/Record of Decision (ROD) presents the selected remedy of no action for IRP Sites 5 and 11, Naval Station San Diego, San Diego, California, where investigation has shown no evidence of contamination. It also presents the selected remedy of no further action for IRP Sites 7 and 12, Naval Station San Diego, San Diego, California.

This document has been prepared in accordance with California Health & Safety Code Section (§) 25356.1 and current United States Environmental Protection Agency guidance (U.S. EPA 1999a). The selected remedy was chosen in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP, Title 40 *Code of Federal Regulations* § 300 et seq.). The decisions for the sites are based on information contained in the administrative record. A site-specific administrative record index for each site is included as Attachment B.

The state of California (through the California Environmental Protection Agency Department of Toxic Substances Control [DTSC] and California Regional Water Quality Control Board [RWQCB] San Diego Region) concurs with the selected remedy at IRP Sites 5, 7, 11, and 12. DTSC is the state regulatory agency overseeing IRP activities, and RWQCB San Diego Region is the delegated authority for water quality issues under the IRP and Underground Storage Tanks Program. IRP Sites 5, 7, 11, and 12 are included in the IRP but are not listed on the National Priorities List. Therefore, the Department of the Navy (DON) determined that a No Action Remedial Action Plan was an appropriate decision document, stating the final remedy of no action and leading to the closure of these sites (California Health & Safety Code § 25356.1). The DON is selecting the no action remedy pursuant to the authority delegated to it by the President of the United States in Executive Order Number (Exec. Order No.) 12580.

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## ASSESSMENT OF THE SITES

On the basis of site histories, visual inspections, field investigations, and laboratory analyses, the DON, as the lead agency, has determined that IRP Sites 5 and 11 do not contain hazardous materials. Therefore, it follows that there is no threat to human health and the environment at IRP Sites 5 and 11. Results of investigations of these sites verify that chemicals of concern (COCs) have not been released to the soil and/or groundwater. Therefore, no CERCLA response action is required to protect public health or welfare or the environment at these sites.

On the basis of site history, visual inspections, field investigations, a thorough assessment of potential human-health and ecological risks at both sites, and a removal action at IRP Site 12, the DON, as the lead agency, has determined that no remedial action is required to protect public health or welfare or the environment at IRP Sites 7 and 12. A human-health risk assessment of IRP Site 7 shows that risk to human health from COCs is within the NCP's generally acceptable risk range, and the contaminants present in groundwater do not present an unacceptable risk to the environment. A human-health and ecological risk assessment of IRP Site 12 shows that risk to human health or the environment from COCs is within the acceptable range.

## STATUTORY DETERMINATIONS

The selected remedy for IRP Sites 5, 7, 11, and 12 is no action. In selecting the no action remedy for these sites, the DON has determined that the existing condition of the sites is protective of human health and the environment and complies with federal and state requirements. Because this remedy will not result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a five-year review will not be required.

## ROD DATA CERTIFICATION CHECKLIST

The Decision Summary includes the following information for IRP Sites 7 and 12:

- COCs and their respective concentrations (Section 5)
- baseline risks represented by the COCs (Section 7)

The Decision Summary includes the following information for IRP Sites 5, 7, 11, and 12:

- current and reasonably anticipated future land-use assumptions and current and potential future beneficial uses of groundwater used in the baseline risk assessment and this RAP/ROD (Section 6)
- key factors that led to selecting the remedy (Section 8)

Additional information can be found in the administrative record files for these sites.

**Declaration**

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Signature: \_\_\_\_\_

Derek B Kemp, Captain  
Commanding Officer, Naval Station San Diego  
United States Department of the Navy  
Lead Federal Agency

Date: \_\_\_\_\_

08 Dec 04

Signature: \_\_\_\_\_

Mr. John E. Scandura, Chief  
Southern California Operations  
Office of Military Facilities  
Department of Toxic Substances Control

Date: \_\_\_\_\_

11/17/04

Signature: \_\_\_\_\_

Mr. John H. Robertus  
Executive Officer  
California Regional Water Quality Control Board  
San Diego Region

Date: \_\_\_\_\_

12/1/04

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# TABLE OF CONTENTS

Section	Page
<b>DECLARATION</b>	<b>1</b>
<b>ACRONYMS/ABBREVIATIONS</b>	<b>ix</b>
<b>DECISION SUMMARY</b>	
<b>1 SITE NAME, LOCATION, AND DESCRIPTION</b>	
1.1 Site Name	1-1
1.2 Site Location	1-1
1.3 Lead and Support Agencies	1-1
1.4 Site Description	1-5
1.4.1 IRP Site 5	1-5
1.4.2 IRP Site 7	1-5
1.4.3 IRP Site 11	1-9
1.4.4 IRP Site 12	1-9
<b>2 SITE HISTORY AND ENFORCEMENT ACTIVITIES</b>	
2.1 IRP Site 5	2-1
2.1.1 Initial Assessment Study of Naval Station San Diego	2-1
2.1.2 Solid Waste Assessment Test	2-2
2.1.3 Request for NFA Designation	2-2
2.2 IRP Site 7	2-4
2.2.1 Geotechnical Investigation	2-4
2.2.2 Preliminary Assessment	2-4
2.2.3 Site Inspection	2-5
2.2.4 Limited Soil Sampling and Analytical Testing	2-5
2.2.5 Removal Site Evaluation	2-5
2.2.6 Remedial Investigation, Human-Health Risk Assessment, and Ecological Risk Assessment	2-6
2.2.7 Request for NFA Designation	2-6
2.3 IRP Site 11	2-6
2.4 IRP Site 12	2-10

Section	Page
<b>3 COMMUNITY PARTICIPATION</b>	
3.1 Restoration Advisory Board	3-1
3.2 Fact Sheets	3-1
3.3 Community Participation for IRP Sites 5, 7, 11, and 12	3-2
3.4 Community Participation for IRP Site 12 Before Proposed Plan	3-4
<b>4 SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION</b>	
<b>5 SITE CHARACTERISTICS</b>	
5.1 Regional Characteristics of IRP Sites 7, 11, and 12	5-1
5.1.1 Topography and Climate	5-1
5.1.2 Geology	5-1
5.1.3 Hydrogeology	5-2
5.1.4 Surface Hydrology	5-2
5.1.5 Sensitive Environments	5-2
5.2 IRP Site 5	5-3
5.2.1 Topography	5-3
5.2.2 Geology and Hydrogeology	5-3
5.2.3 Surface Hydrology	5-4
5.2.4 Sensitive Environments	5-4
5.2.5 Site History	5-5
5.2.6 Site Investigations	5-5
5.2.6.1 Solid Waste Assessment Test	5-5
5.2.6.2 PWC Fifth-Round Groundwater Sampling	5-13
5.3 IRP Site 7	5-13
5.3.1 Hydrogeology and Geology	5-13
5.3.2 Site Investigations	5-14
5.3.2.1 Geotechnical Investigation	5-17
5.3.2.2 Preliminary Assessment	5-17
5.3.2.3 Site Inspection	5-17
5.3.2.4 Soil Sampling and Laboratory Testing	5-18
5.3.2.5 Removal Site Evaluation	5-18
5.3.2.6 Additional Investigations	5-32
5.3.3 Nature and Extent of Contamination	5-43

## Table of Contents

Section	Page
5.3.3.1 Soil	5-46
5.3.3.2 Groundwater	5-47
5.3.4 Potential Migration Pathways	5-48
5.4 IRP Site 11	5-51
5.4.1 Site History	5-51
5.4.2 Site Investigations	5-51
5.5 IRP Site 12	5-53
5.5.1 Geology and Hydrology	5-54
5.5.2 Site History	5-54
5.5.3 Site Investigations	5-54
5.5.3.1 Preremoval-Action Investigations	5-59
5.5.3.2 Removal Action	5-62
5.5.3.3 Postremoval-Action Investigations	5-63
<b>6 CURRENT AND POTENTIAL SITE AND RESOURCE USES</b>	
6.1 Land Uses	6-1
6.1.1 IRP Site 5	6-1
6.1.2 IRP Sites 7, 11, and 12	6-1
6.1.2.1 IRP Site 7	6-1
6.1.2.2 IRP Site 11	6-2
6.1.2.3 IRP Site 12	6-2
6.2 Groundwater Uses at IRP Sites 7 and 12	6-2
6.3 Surface Water Uses at IRP Sites 7 and 12	6-2
<b>7 SUMMARY OF SITE RISKS</b>	
7.1 IRP Site 7 Baseline Risk Assessment	7-1
7.1.1 Identification of Chemicals of Potential Concern	7-2
7.1.2 Exposure Assessment	7-2
7.1.2.1 Exposure Scenarios	7-5
7.1.2.2 Exposure Pathways	7-6
7.1.3 Toxicity Assessment	7-6
7.1.4 Risk Characterization for IRP Site 7	7-8
7.1.4.1 Cancer Risk Estimates	7-9
7.1.4.2 Hazard Index Estimates	7-9

## Table of Contents

Section		Page
	7.1.4.3 Hypothetical Resident Excess Lifetime Cancer Risk...	7-11
	7.1.4.4 Hypothetical Resident Systemic Toxicity...	7-11
7.2	IRP Site 12 Baseline Risk Assessment .....	7-11
	7.2.1 Identification of Chemicals of Potential Concern .....	7-12
	7.2.2 Exposure Assessment .....	7-16
	7.2.2.1 Exposure Scenarios .....	7-16
	7.2.2.2 Exposure Pathways .....	7-17
	7.2.3 Toxicity Assessment .....	7-18
	7.2.4 Risk Characterization for IRP Site 12 .....	7-18
	7.2.4.1 Cancer Risk .....	7-23
	7.2.4.2 Noncancer Risk .....	7-23
7.3	Ecological Risk Assessment .....	7-25
	7.3.1 Ecological Risk Assessment for IRP Site 7 .....	7-25
	7.3.1.1 Conceptual Site Model .....	7-25
	7.3.1.2 Ecotoxicity of Chemicals of Potential Ecological Concern .....	7-28
	7.3.1.3 Exposure Estimate .....	7-28
	7.3.1.4 Risk Estimation .....	7-31
	7.3.1.5 Refined Exposure Estimate .....	7-31
	7.3.1.6 Risk Characterization .....	7-38
	7.3.2 Ecological Risk for IRP Site 12 .....	7-41
	7.3.2.1 Assessment Results .....	7-42
	7.3.2.2 Ecological Uncertainties at IRP Site 12 .....	7-42
7.4	Basis for Risk-Management Decisions .....	7-44
	7.4.1 IRP Site 7 .....	7-44
	7.4.1.1 Background Level of Contaminants .....	7-44
	7.4.1.2 Ability to Monitor and Control Movement of Contaminants .....	7-45
	7.4.1.3 Reliability of Exposure Data .....	7-45
	7.4.1.4 Distribution of Contaminants .....	7-46
	7.4.2 IRP Site 12 .....	7-46
	7.4.2.1 Removal of PAH-Contaminated Soil .....	7-47
	7.4.2.2 Background Level of Arsenic in Soil .....	7-47
	7.4.2.3 Reliability of Exposure Data .....	7-47



## Table of Contents

## Section

- 8 DESCRIPTION OF NO ACTION ALTERNATIVE**
- 9 DOCUMENTATION OF SIGNIFICANT CHANGES**
- 10 REFERENCES**
- RESPONSIVENESS SUMMARY**

**ATTACHMENTS**

## Attachment

- A NO FURTHER ACTION LETTERS**
- B ADMINISTRATIVE RECORD FILE INDEX FOR NO ACTION SITES**
- C TRANSCRIPT FROM PUBLIC MEETING**

**FIGURES**

Figure	Page
1-1 Regional Location	1-2
1-2 IRP Site Locations	1-3
1-3 Site Map – IRP Site 5	1-6
1-4 Site Map – IRP Site 7	1-7
1-5 Site Map – IRP Site 11	1-10
1-6 Site Map – IRP Site 12	1-11
5-1 IRP Site 5 Solid Waste Assessment Test, 1992/1993 Sample Locations	5-6
5-2 Groundwater-Elevation Contour Map – IRP Site 7	5-15

## Table of Contents

Figure	Page
5-3 VOCs and TRPH in Soil (RSE Data) – IRP Site 7	5-29
5-4 Benzo(a)pyrene in Soil Exceeding PRG – IRP Site 7	5-33
5-5 Organochlorine Pesticides and PCBs in Soil – IRP Site 7	5-35
5-6 Groundwater Results – IRP Site 7	5-37
5-7 Potential Migration Pathways – IRP Site 7	5-50
5-8 Groundwater Contour Map – IRP Site 12	5-55
5-9 Investigations Conducted Prior to Removal Action – IRP Site 12	5-57
5-10 Conceptual Model – IRP Site 12	5-60
5-11 ESI Soil Analytical Results for Organics – IRP Site 12	5-69
5-12 ESI Soil Analytical Results for Metals – IRP Site 12	5-71

## TABLES

Table	
2-1 Summary of Investigations Conducted at IRP Site 5 Before 1997	2-3
2-2 Summary of Investigations Conducted at IRP Site 7	2-7
2-3 Summary of Investigations Conducted at IRP Site 11	2-10
2-4 Summary of Historical Photograph Review of IRP Site 12	2-11
2-5 Summary of Investigations Conducted at IRP Site 12	2-13
3-1 Summary of Naval Station San Diego Fact Sheets	3-3
5-1 Summary of Soil Data, IRP Site 5	5-7
5-2 Summary of Groundwater Data, IRP Site 5	5-9
5-3 Summary of Surface Water Data, IRP Site 5	5-11
5-4 Soil Analytical Results, 1987 Geotechnical Investigation, IRP Site 7	5-18

## Table of Contents

Table	Page
5-5 Analytes Reported in Soil Above Laboratory Method-Detection Limits, 1992 Site Inspection, IRP Site 7	5-19
5-6 Groundwater Sampling Summary, IRP Site 7	5-21
5-7 Summary of Analytes Reported in Soil Above Laboratory Method-Detection Limits, 1994 Limited Soil Sampling, IRP Site 7	5-23
5-8 Summary of Analytes Reported in Soil Above Laboratory Method-Detection Limits During the Removal Site Evaluation, IRP Site 7	5-25
5-9 Summary of RSE Supplemental Soil Sampling Results Above Laboratory Method-Detection Limits, IRP Site 7	5-28
5-10 Detection Limits for RSE Groundwater Samples for Analytes Without Reported Concentrations – IRP Site 7	5-39
5-11 Summary of Analytes Reported in Soil Above Laboratory Method-Detection Limits, 2003 Supplemental Investigation, IRP Site 7	5-44
5-12 Summary of Soil Data, IRP Site 11	5-52
5-13 Summary of Groundwater Data, IRP Site 11	5-53
5-14 Analytes Reported Above Detection Limits in Soil Samples, IRP Site 12	5-65
5-15 Analytes Reported Above the Laboratory Detection Limit in Monitoring Wells After Removal Action, IRP Site 12	5-67
7-1 Residential Soil Exposure Point Concentrations for COPCs, IRP Site 7	7-3
7-2 Values Assigned to the Parameters in the Dose Formulas, IRP Site 7	7-7
7-3 Summary of Lifetime Cancer Risk and Hazard Indices by Pathway, IRP Site 7	7-9
7-4 Summary of Cancer Risk Drivers, IRP Site 7	7-10
7-5 Detection Frequency, Highest Reported Concentration, and Background Concentrations of Inorganic COPC Candidates Reported in Samples of Soil Shallower Than 12 Feet bgs, IRP Site 12	7-13
7-6 Detection Frequency and Highest Reported Concentration of Organic COPC Candidates Reported in Samples of Soil Shallower Than 12 Feet bgs, IRP Site 12	7-14

## Table of Contents

Table	Page
7-7 Detection Frequency and Highest Reported Concentration of Inorganic and Organic COPCs in Samples of Soil Shallower Than 2 Feet bgs, IRP Site 12 .....	7-15
7-8 Chemicals of Potential Concern in Groundwater, IRP Site 12 .....	7-17
7-9 Exposure Assumptions for Human-Health Risk Assessment, IRP Site 12 .....	7-19
7-10 U.S. EPA Reference Doses and Cancer Slope Factors, IRP Site 12 .....	7-20
7-11 Exposure Point Concentrations of Chemicals of Potential Concern in Soil, IRP Site 12 .....	7-22
7-12 Estimates of Excess Cancer Risk and Calculated Hazard Indices, IRP Site 12 .....	7-24
7-13 Summary of Reported Chemicals in Groundwater, IRP Site 7 .....	7-27
7-14 Toxicity Reference Values for Aquatic Life, IRP Site 7 .....	7-29
7-15 Toxicity Reference Values for Aquatic-Dependent Wildlife, IRP Site 7 .....	7-30
7-16 Hazard Quotients for Aquatic Life, IRP Site 7 .....	7-32
7-17 Hazard Quotient Calculations for Aquatic-Dependent Wildlife, Screening-Level Ecological Risk Assessment, IRP Site 7 .....	7-33
7-18 Maximum Modeled Concentration and Time to Reach Bay at TRV Concentration, IRP Site 7 .....	7-37
7-19 Hazard Quotients for Aquatic Life Using Refined Exposure Estimate, IRP Site 7 .....	7-37
7-20 Hazard Quotient Calculations for Aquatic-Dependent Wildlife, Screening-Level Risk Assessment With Refined Exposure Estimate, IRP Site 7 .....	7-39
7-21 Chemicals of Potential Concern in Groundwater, IRP Site 12 .....	7-43

## ACRONYMS/ABBREVIATIONS

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ARAR	applicable or relevant and appropriate requirement
ATSDR	Agency for Toxic Substances and Disease Registry
BEI	Bechtel Environmental, Inc.
Benton	Benton Engineering, Incorporated
bgs	below ground surface
BHC	benzene hexachloride
BNA	base, neutral, and acid
BNI	Bechtel National, Inc.
BTAG	Biological Technical Assistance Group
BTEX	benzene, toluene, ethylbenzene, and xylenes
Cal. Code Regs.	<i>California Code of Regulations</i>
Cal/EPA	California Environmental Protection Agency
California Toxics Rule	Numeric Criteria for Priority Toxic Pollutants for the State of California
Cal-Modified	Cal/EPA-modified
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
ch.	chapter
CLEAN	Comprehensive Long-Term Environmental Action Navy
COC	chemical of concern
COPC	chemical of potential concern
COPEC	chemical of potential ecological concern
CSF	cancer slope factor
CWA	Clean Water Act
DoD	Department of Defense
DON	Department of the Navy
DTSC	(Cal/EPA) Department of Toxic Substances Control
EFA-West	Engineering Field Activity, West
EPC	exposure point concentration
ERA	ecological risk assessment
ESI	expanded site inspection
°F	degrees Fahrenheit
FFTF	Fire-Fighting Training Facility
ft/ft	feet per foot
ha	hectare
HHRA	human-health risk assessment

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HI	hazard index
HQ	hazard quotient
IAS	initial assessment study
IRP	Installation Restoration Program
IT	International Technology Corporation
JEG	Jacobs Engineering Group Inc.
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
Mac General	Mac General Corporation
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MILCON	military construction
MSL	mean sea level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEESA	Naval Energy and Environmental Support Activity
NFA	no further action
NOAEL	no observed adverse effects level
NTCRA	non-time-critical removal action
NWS	National Weather Service
OHM	OHM Remediation Services Corp.
PA	preliminary assessment
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PRG	preliminary remediation goal
PTES	Pacific Treatment Environmental Services, Inc.
PWC	(Navy) Public Works Center
RAB	Restoration Advisory Board
RAP	remedial action plan
RECON	Regional Environmental Consultants
RfD	reference dose
RI	remedial investigation
ROD	record of decision
RSE	removal site evaluation
RWQCB	(California) Regional Water Quality Control Board

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## Acronyms/Abbreviations

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§	section
SI	site inspection
SQL	sample quantitation limit
SUF	site-use factor
SVOC	semivolatile organic compound
SWAT	solid waste assessment test
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	solid waste management unit
SWRCB	(California) State Water Resources Control Board
TCRAM	time-critical removal action memorandum
tit.	title
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
TRV	toxicity reference value
UCL	upper confidence limit
U.S. EPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound
WCC	Woodward-Clyde Consultants

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## **DECISION SUMMARY**



## Section 1

# SITE NAME, LOCATION, AND DESCRIPTION

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This decision document presents the selected remedial action for Installation Restoration Program (IRP) Sites 5, 7, 11, and 12, Naval Station San Diego, San Diego County, California. This section describes the environmental setting for the no action sites: IRP Site 5, at the Admiral Baker Golf Course (north of Naval Station San Diego), and IRP Sites 7, 11, and 12, at Naval Station San Diego. As discussed below, the information is summarized from previous investigations conducted at the four sites.

## 1.1 SITE NAME

The IRP sites addressed in this decision document are as follows:

- IRP Site 5, Admiral Baker Golf Course Landscaping-Debris Landfill
- IRP Site 7, Former Sewage Treatment Plant
- IRP Site 11, French Drain
- IRP Site 12, Brinser Street Parking Area

## 1.2 SITE LOCATION

Naval Station San Diego (Figure 1-1) occupies approximately 1,355 acres of land and water along the eastern shore of San Diego Bay and straddles the boundary between San Diego and National City.

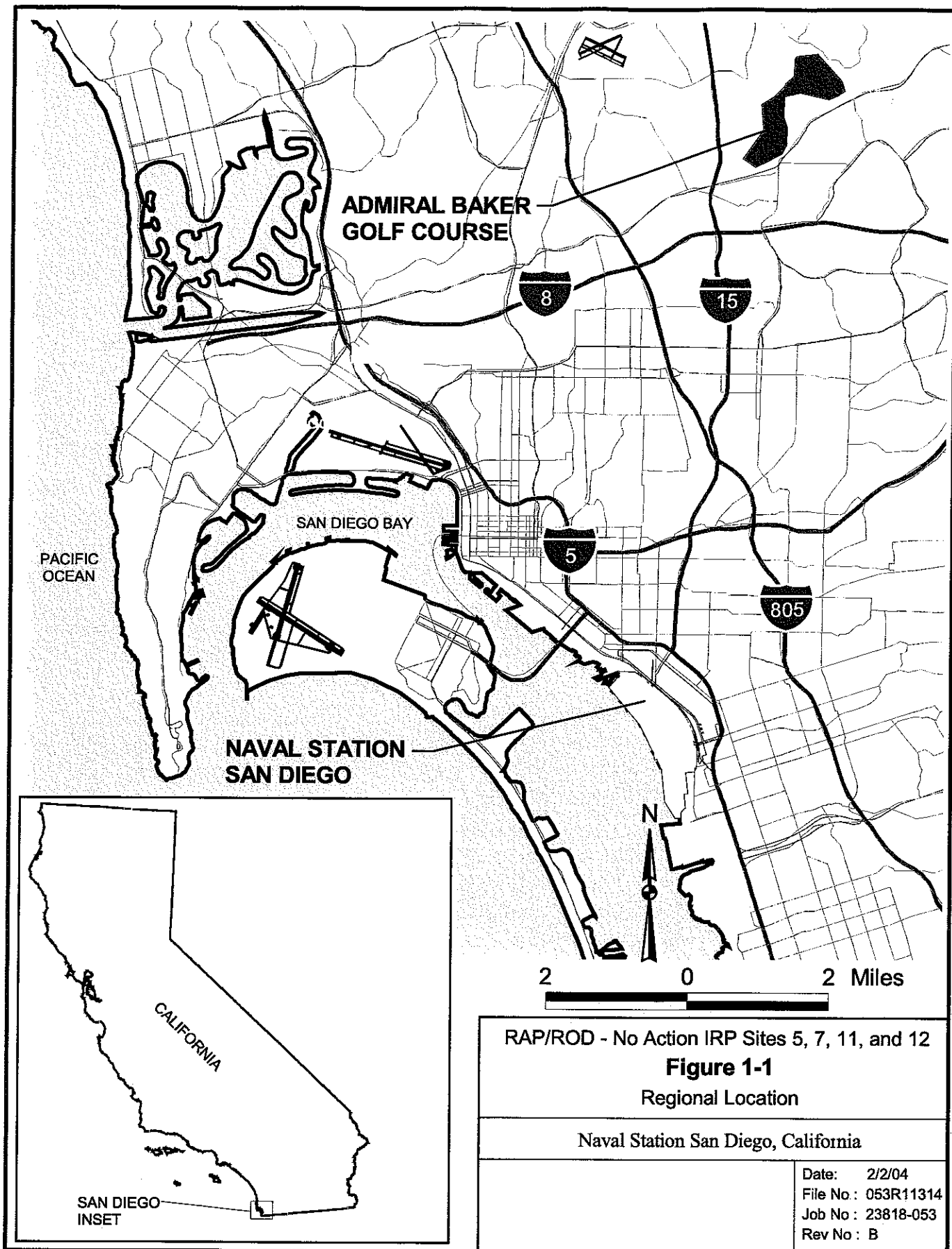
Three of the sites (IRP Sites 7, 11, and 12) included in this decision document are in the central portion of Naval Station San Diego (Figure 1-2). IRP Site 7 is approximately 800 feet east of San Diego Bay, IRP Site 11 is approximately 250 feet from San Diego Bay, and IRP Site 12 is less than 50 feet from San Diego Bay (BNI 1995a).

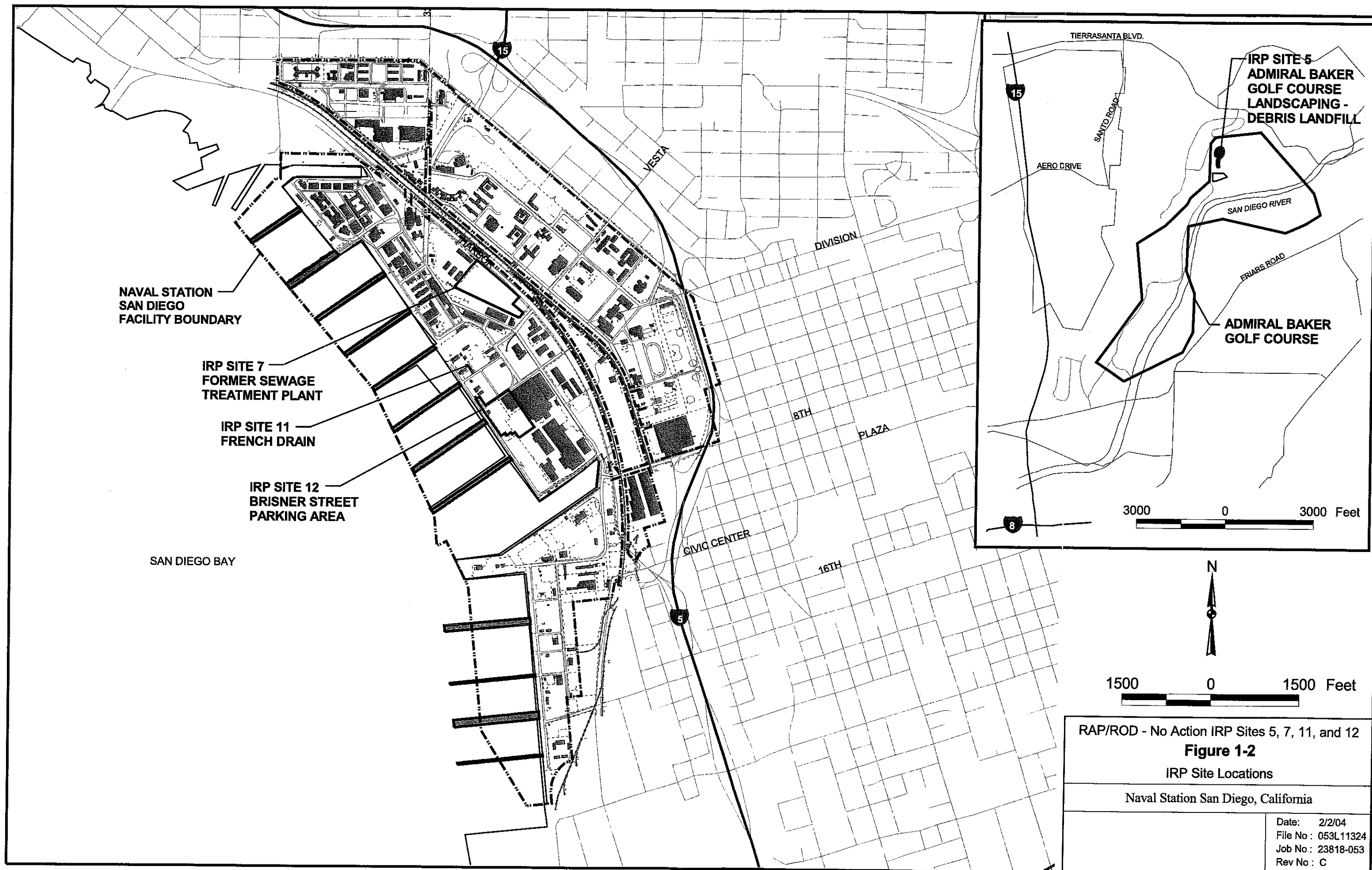
The fourth site, IRP Site 5, Admiral Baker Golf Course Landscaping-Debris Landfill, is administratively part of Naval Station San Diego but is located on a satellite property situated approximately 10 miles north of Naval Station San Diego. Admiral Baker Golf Course is approximately 2 miles northeast of the junction of Interstate Highways 8 and 15 in San Diego (Figure 1-2) (BNI 1995a).

## 1.3 LEAD AND SUPPORT AGENCIES

Naval Station San Diego is a federal facility. The United States Department of the Navy (DON) is the lead agency responsible for environmental restoration, remedial investigation, and remedial action at this facility. The IRP is funded under the DON environmental restoration account.

Regulatory agencies providing support and oversight include the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (RWQCB) San Diego Region. DTSC





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## Section 1 Site Name, Location, and Description

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is the state regulatory agency overseeing installation restoration activities, and RWQCB is the delegated authority for water quality issues under the IRP and for underground storage tank (UST) sites. RWQCB is the state regulatory agency for IRP Site 5.

### 1.4 SITE DESCRIPTION

Naval Station San Diego presently includes approximately 1,029 land acres and 326 water acres, providing personnel- and logistic-support services to 52 major tenant commands. Approximately 35,000 military personnel are assigned to the base. This large population requires a variety of industrial facilities to support ship, ground vehicle, and base maintenance operations.

#### 1.4.1 IRP Site 5

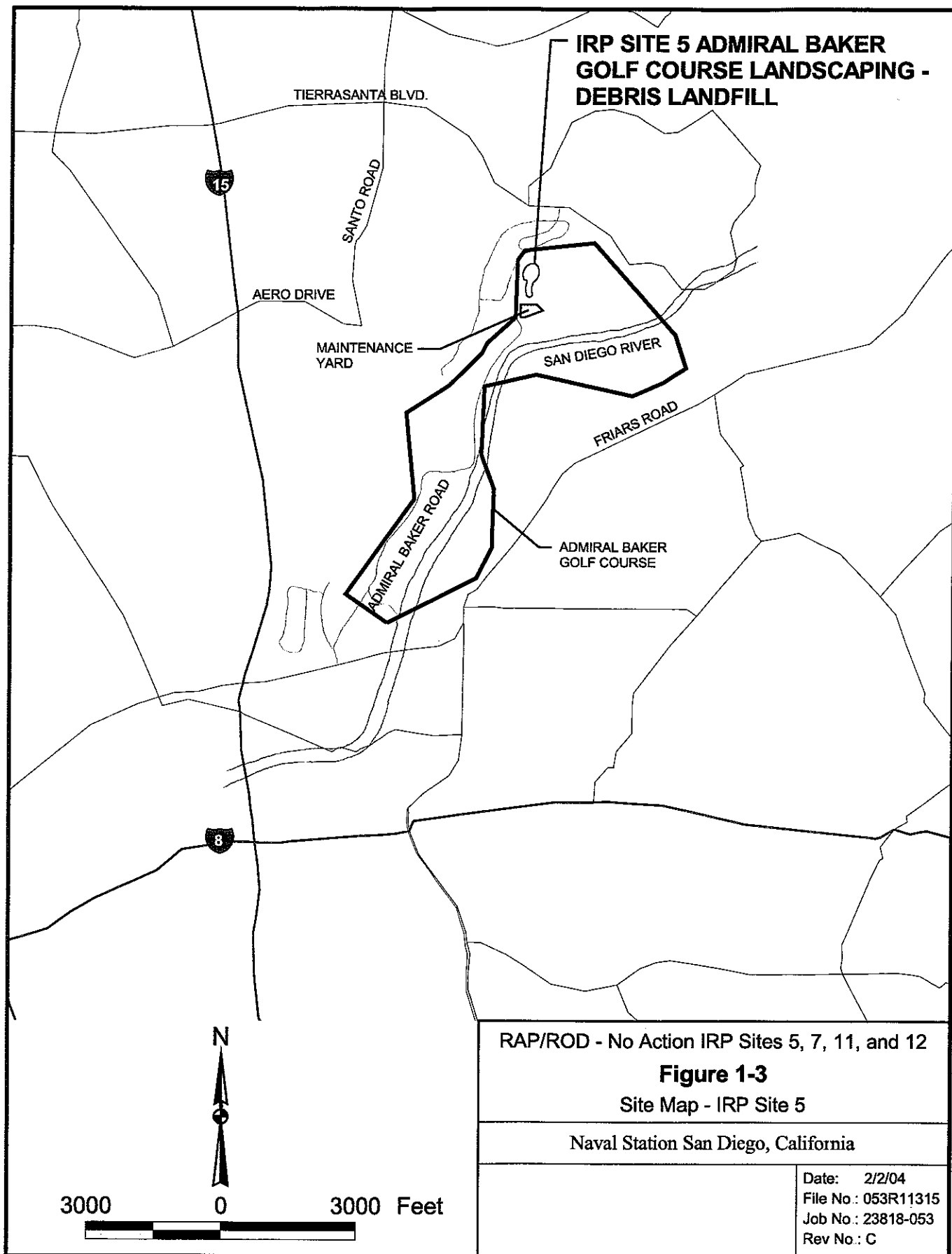
IRP Site 5, Admiral Baker Golf Course Landscaping-Debris Landfill, is inactive and lies in a saddle between two low hills, 300 feet north of the maintenance yard at the north end of Admiral Baker Golf Course (Figure 1-3).

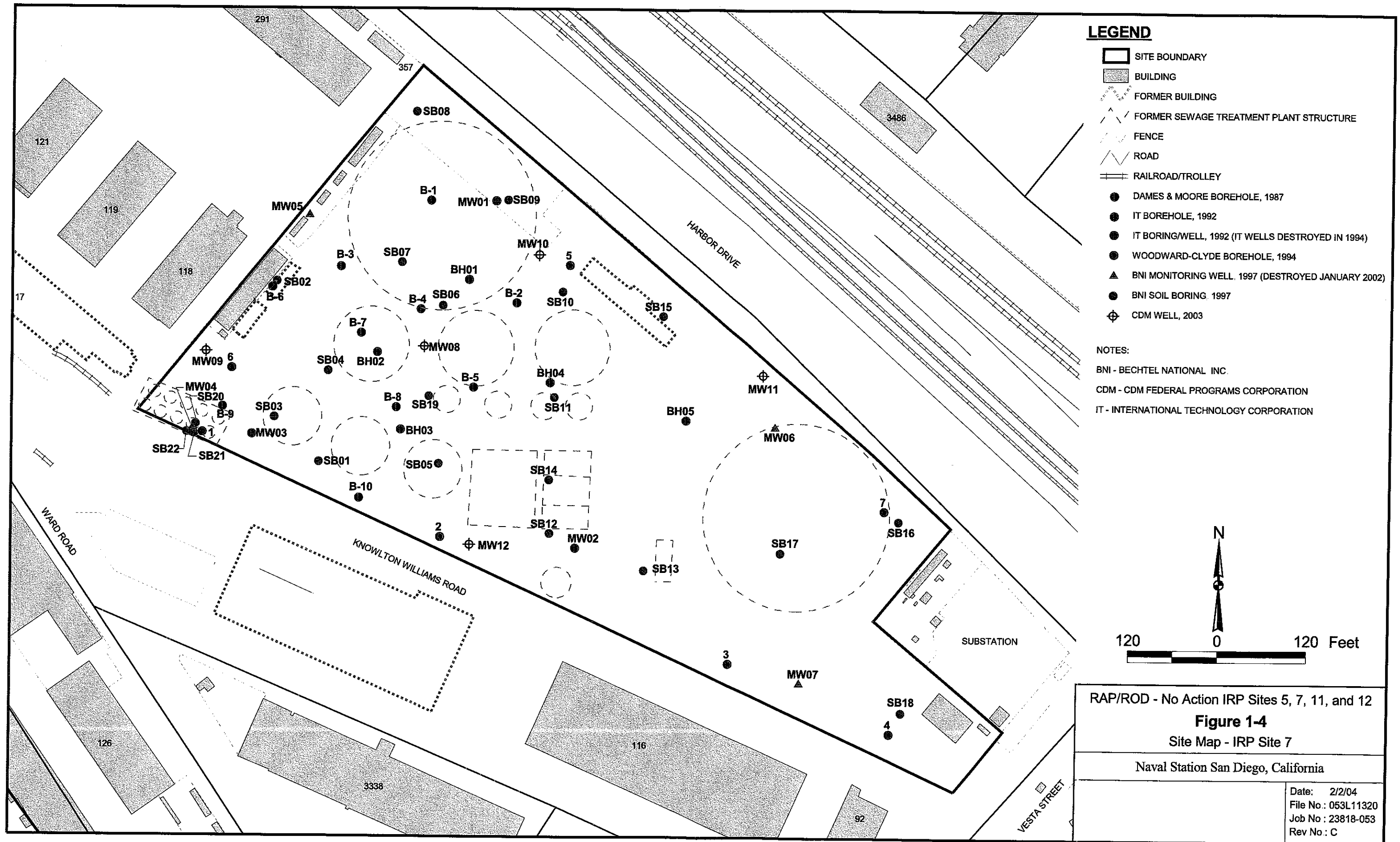
IRP Site 5 contains unknown quantities of organic groundskeeping wastes (e.g., grass, brush, and tree trimmings) and concrete demolition debris (e.g., concrete, scrap metal, and refuse). IRP Site 5 was reportedly used only for organic grounds waste (e.g., grass, brush, and tree trimmings) disposal; however, during visual inspection of the site during the initial assessment study (IAS) in 1985 and during the solid waste assessment tests (SWATs) in 1992 and 1993, it was found that concrete, scrap metal, and refuse had also been deposited at the site (NEESA 1986, JEG and IT 1993). The landscaping-debris landfill is irregularly shaped with 400- to 500-foot-long perimeter segments and a surface area of approximately 80,000 square feet (approximately 1.8 acres) (Figure 1-3) (JEG and IT 1993). There is no evidence of USTs at IRP Site 5. The areas surrounding IRP Site 5 are used for residential and recreational purposes (NEESA 1986, BNI 1995a).

#### 1.4.2 IRP Site 7

IRP Site 7, Former Sewage Treatment Plant, is a wedge-shaped parcel bounded on the north by the Navy Public Works Center (PWC) facilities, on the southeast by Vesta Street, on the northeast by Harbor Drive, and on the southwest by Knowlton Williams Road (Figure 1-4). The site is approximately 1,250 feet long and 600 feet wide at the widest point, tapering and stepping to about 90 feet wide along the southern end. The area of the site encompasses approximately 460,000 square feet (approximately 11 acres) and does not include the San Diego Gas and Electric substation in the southeast corner of the site.

IRP Site 7 is currently paved with asphalt and is used as a parking lot. According to the proposed land-use plan presented in the Naval Station San Diego Master Plan, the use of this site is not expected to change in the foreseeable future (DON 1990).







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Section 1 Site Name, Location, and Description

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### 1.4.3 IRP Site 11

IRP Site 11, French Drain, is in an asphalt-paved parking/storage area at the northwestern corner of Building 3053 at Naval Station San Diego (Figure 1-5). On 23 April 1996, Pacific Treatment Environmental Services, Inc. (PTES), inspected IRP Site 11 and identified it as a condensate and pressure vent for the heating and ventilation system in Building 3053. The French drain is a 10-foot-deep by 36-inch-diameter corrugated pipe backfilled with 3/4-inch crushed rock (PTES 1996).

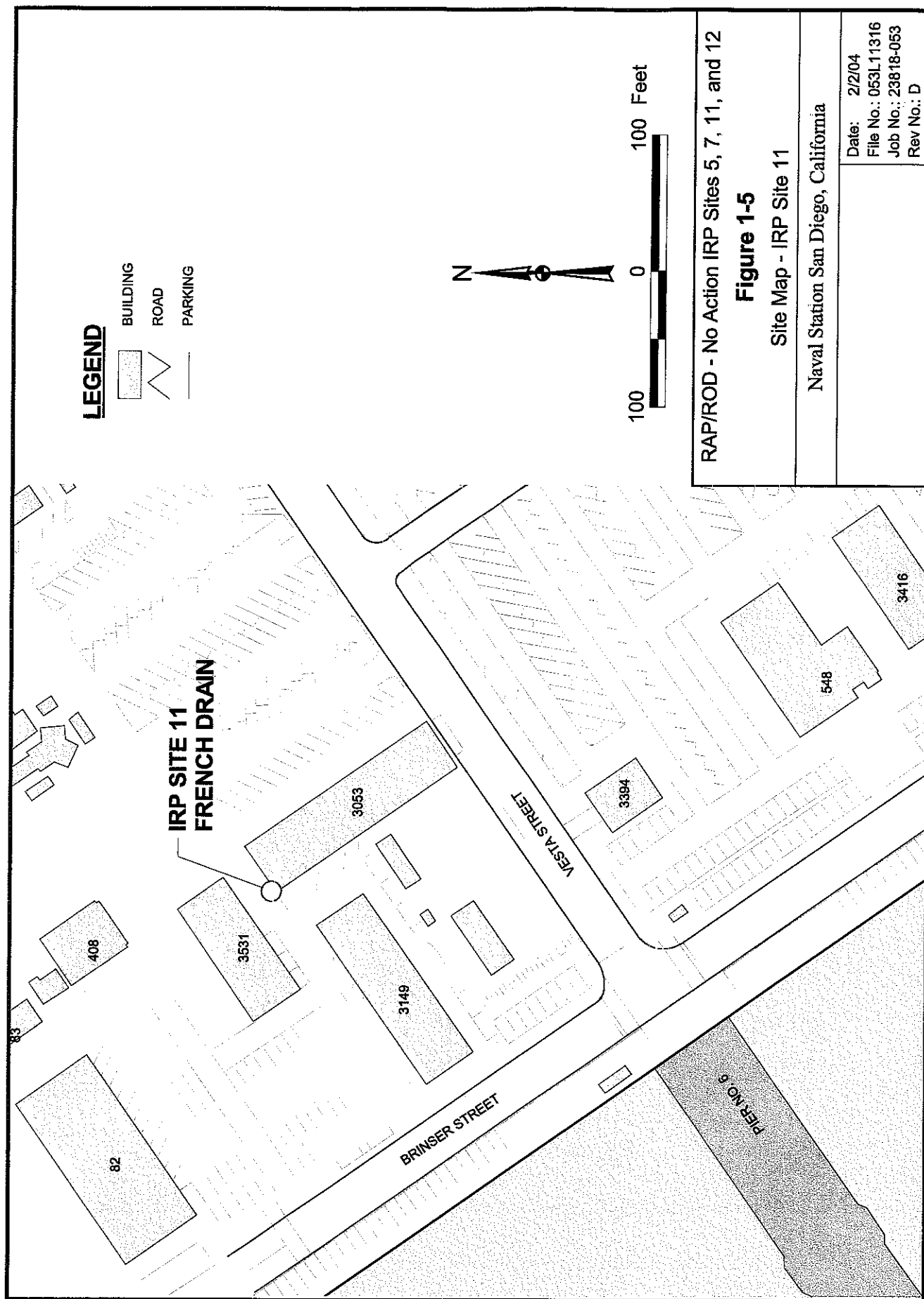
Two 1- to 1-1/2-inch-diameter steam pipes extend from Building 3053 into the drain (Figure 1-5). These pipes originate from a locker room inside Building 3053 (BNI 1995a).

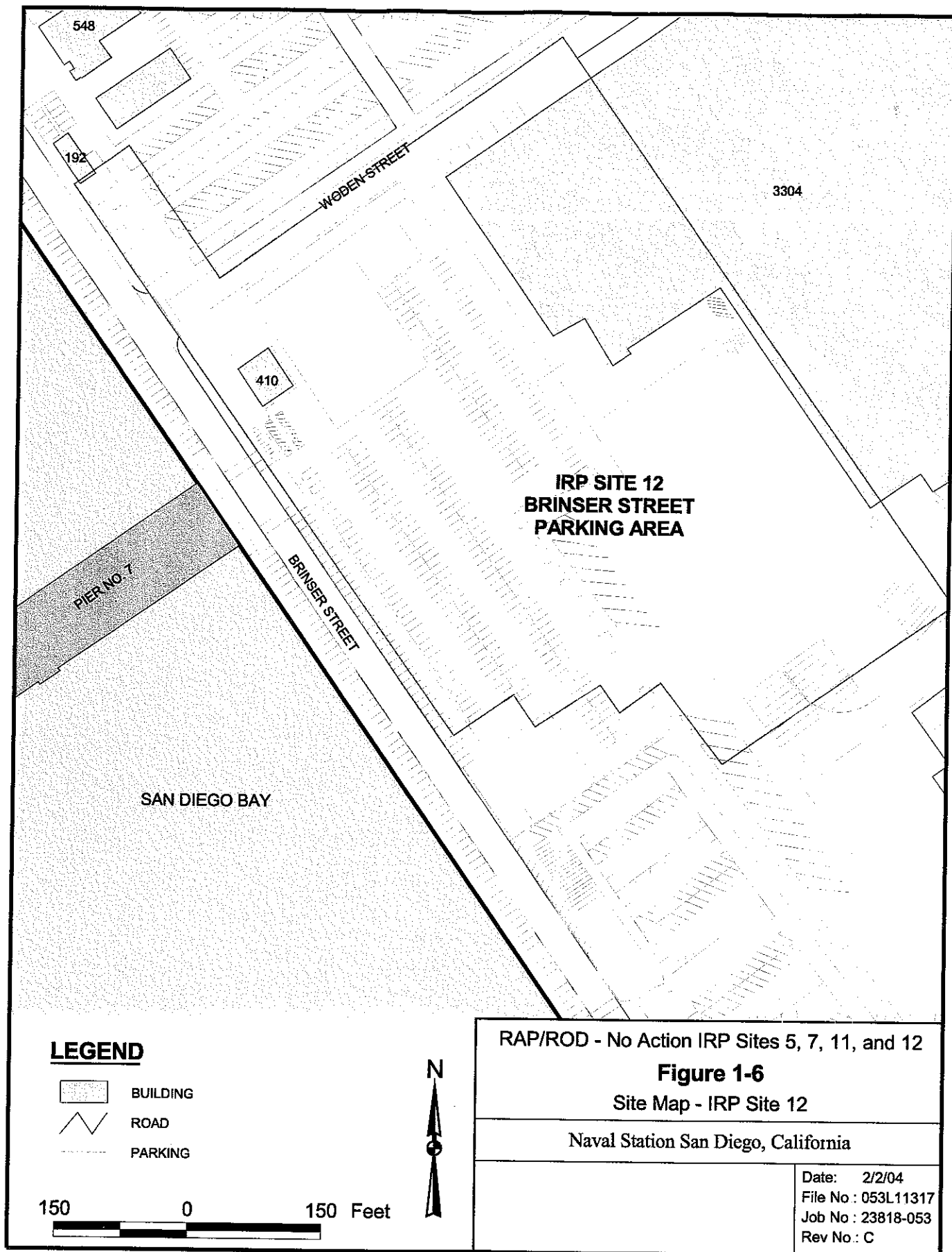
The USTs closest to IRP Site 11 were removed from Building 3149 before 1995 and were reported in the IRP Plan as requiring no further action. These USTs, identified as 3149-A and 3149-B, were approximately 100 feet from IRP Site 11. The IRP Plan indicates USTs are no longer present within 1,000 feet of IRP Site 11. The areas surrounding IRP Site 11 are used for industrial purposes (BNI 1995a).

### 1.4.4 IRP Site 12

IRP Site 12, Brinser Street Parking Area, is along Brinser Street, on the southeast corner of the intersection of Brinser and Woden Streets. To the north, the site is largely bounded by Woden Street and a paved parking lot extending northwest, including a motorcycle parking area near the corner of the intersection. The Fire-Fighting Training Facility (FFTF) (IRP Site 8) borders IRP Site 12 to the southeast, and other facility buildings border the site to the east. To the west, the site is bounded by Brinser Street and San Diego Bay (Figure 1-6) (BNI 1998b).

The central portion of IRP Site 12 extends approximately 750 feet in a northwest-southeast direction and 550 feet in a northeast-southwest direction. A chain-link fence divides IRP Site 12 into eastern and western portions, and both portions are paved with asphalt. Base personnel indicated that the western portion of IRP Site 12 has been used as a parking area for many years and is now also used as a staging area for loading and unloading military equipment from ships. The eastern portion serves as a shipping and receiving area for the Defense Distribution Depot Center warehouse (BNI 1998b).





Section 1 Site Name, Location, and Description

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## Section 2

# SITE HISTORY AND ENFORCEMENT ACTIVITIES

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Naval Station San Diego has been used for shipping-related activities since 1919, when the city of San Diego deeded the original property (approximately 98 acres of mixed dry and marsh land) to the United States government. In 1921, the United States Navy San Diego Destroyer Base began operations at Naval Station San Diego with the mission of maintaining decommissioned World War I destroyers. Subsequently, the size of the base increased through land acquisition, including construction of made land, and facilities development. Most growth occurred after the Naval Repair Base was established in 1943. From 1943 until the end of World War II, more than 5,000 ships were sent to the Naval Repair Base for conversion, overhaul, battle-damage repair, and maintenance. The base consisted of 823 acres in 1946, when the repair base was redesignated as Naval Station San Diego with the primary mission of providing logistical support, including repair and dry-docking, to locally based units of the 19th fleet.

Naval Station San Diego currently provides personnel and logistical support to 52 major tenant commands. Approximately 35,000 military personnel are assigned to the base. This large population requires a variety of industrial facilities to support ship, ground vehicle, and base maintenance operations.

The Department of Defense (DoD) developed the IRP in 1980 to comply with federal guidelines to manage and control past hazardous waste disposal actions. Environmental-restoration activities at Naval Station San Diego are performed under the DON IRP.

Twenty sites have been identified since the IAS of Naval Station San Diego, including 13 IRP sites and 7 solid waste management units (SWMUs) that have also been assigned IRP site numbers. The base received written notification from the United States Environmental Protection Agency (U.S. EPA) Region 9 in May 1994 that Naval Station San Diego "... does not appear eligible for the National Priorities List at this time."

The DON is the lead agency for the Naval Station San Diego IRP. DTSC is the state regulatory agency for IRP Sites 1, 2, 3, 4, 6, 7, 10, 11, 12, 13, and 20; and RWQCB is the state regulatory agency for IRP Sites 5 and 8.

## 2.1 IRP SITE 5

The Admiral Baker Golf Course was commissioned in 1956 and currently consists of two 18-hole courses. IRP Site 5 consists of an area formerly designated for disposal of on-site landscaping debris from the golf course. The site was used as a disposal area for green organic debris and debris generated from golf course grounds-maintenance activities. The landscaping-debris landfill became inactive in 1974, and approximately 4 feet of earthen cover was placed on top of the fill area (NEESA 1986).

### 2.1.1 Initial Assessment Study of Naval Station San Diego

In 1986, the DON began work on an IAS to locate potentially contaminated sites at Naval Station San Diego. This work was conducted for the Naval Facilities Engineering

Command under the Navy Assessment and Control of Installation Pollutants Program, which was the DON version of the DoD IRP at that time.

The IAS Report identified six sites as potential sources of contamination (NEESA 1986). The identification of potentially contaminated sites was based on the results of record searches and employee interviews. The report recommended sampling locations and analytical parameters to confirm the suspected contamination at the sites. IRP Site 5, at the Admiral Baker Golf Course, was one of the six potential disposal sites identified in the IAS Report.

The IAS Report concluded that, on the basis of the volume and nature of the wastes disposed at the landscaping-debris landfill, IRP Site 5 was not likely to pose any current or future threat to residents in the surrounding housing area or to the environment. A confirmation study (the next phase of investigation) was not recommended for IRP Site 5 (NEESA 1986).

### **2.1.2 Solid Waste Assessment Test**

In 1993, a SWAT was conducted at IRP Site 5 to determine whether the site was leaching hazardous substances and degrading groundwater quality (JEG and IT 1993). The investigation and report were conducted in accordance with the SWAT guidance document entitled Technical Guidance Manual, Solid Waste Quality Assessment Test Proposals and Reports, which was issued by the State Water Resources Control Board (SWRCB) in August 1988. The SWAT included document review, visual inspection, soil and groundwater sampling, and data evaluation. This test led to the conclusion that no remedial measures were necessary. However, the SWAT Report recommended that groundwater monitoring be performed on an annual or biannual basis to evaluate groundwater conditions both upgradient and downgradient of the landfill. It was also recommended that the earthen cover be maintained to prevent exposure of the landscaping debris by erosion. IRP Site 5 was never formally permitted as a landfill or disposal facility and has no existing permits (JEG and IT 1993).

### **2.1.3 Request for NFA Designation**

On 21 November 1996, the DON requested a no further action (NFA) determination for IRP Site 5. Included with the NFA recommendation were results of groundwater monitoring performed in 1996. RWQCB staff reviewed the available information and concurred with the DON recommendation of NFA for IRP Site 5 under the IRP. On 07 August 1997, RWQCB issued a letter of concurrence that no further action was needed at IRP Site 5 under the IRP. A copy of the NFA letter is included in Attachment A.

Table 2-1 summarizes the investigations and findings and lists report titles for activities conducted at IRP Site 5. The pertinent findings of each of the previous investigations at IRP Site 5 are discussed in detail in Section 5.

No enforcement actions are associated with IRP Site 5.

## Section 2 Site History and Enforcement Activities

**Table 2-1**  
**Summary of Investigations Conducted at IRP Site 5 Before 1997**

<b>Contractor/Date</b>	<b>Investigation</b>	<b>Findings</b>	<b>Report Title</b>
Naval Energy and Environmental Support Activity May 1986	Records and on-site survey regarding past activities, industrial practices and waste disposal records, and known contamination were reviewed.	The nature of wastes disposed at the golf course should not pose any current or future threat to people in the surrounding housing area or to the environment.	Initial Assessment Study of Naval Station San Diego, California
Jacobs Engineering Group Inc., and International Technology Corporation October 1993	Existing documentation was reviewed. Three soil borings were advanced, and soil samples were collected. These borings were converted to groundwater monitoring wells. Four quarters of groundwater monitoring were conducted.	Hazardous materials were not received at landfill. There was no evidence to suggest landfill has impacted groundwater. Gas migration from landfill has not affected the regional groundwater or surface water. No remedial measures are required. Groundwater monitoring should continue, and landfill cap should be maintained.	Final Solid Waste Assessment Test Report, Admiral Baker Golf Course (Site 5), Naval Station San Diego, California
Navy Public Works (Department of the Navy) November 1996	One groundwater sample was collected from each of the three monitoring wells.	There was no indication that groundwater has been impacted by hazardous substances at the site.  Requested no further action and acknowledgement that postclosure requirements have been met.	Letter from V.E. Smith, Captain, U.S. Navy Commanding Officer to John Anderson, California Regional Water Quality Control Board, transmitting additional groundwater monitoring results

Acronym/Abbreviation:

IRP – Installation Restoration Program

## **2.2 IRP SITE 7**

IRP Site 7 was originally developed as a municipal sewage treatment plant (Harbor Drive Sewer Plant). The facility was constructed between 1948 and 1951 and was operated by the city of San Diego from 1951 through 1963. Available drawings indicate that the sewage treatment plant consisted of maintenance and administrative buildings, digesters, clarifiers, elutriation tanks (used to “wash” undesired substances from sludge that interfered with the subsequent chemical conditioning or filtration of the sludge), sludge storage buildings, a detritor building, and other associated facilities. Effluent from the plant was discharged into San Diego Bay near Pier No. 5. The plant was decommissioned in 1963 when the Point Loma sewage treatment facility became operational.

Aerial photographs indicate that the electrical substation located adjacent to the southeast corner of the site was constructed between 1954 and 1972. The substation is currently operated by San Diego Gas and Electric and is not under jurisdiction of the DON.

The DON acquired IRP Site 7 in 1977. The treatment plant was demolished in 1978, and the majority of the site remained vacant, except for the substation and a building in the northwest corner, until 1983, when the southern portion was graded for a parking area. By 1985, the entire site had been graded for parking and was paved with asphalt in November 1994.

### **2.2.1 Geotechnical Investigation**

A geotechnical investigation was performed at IRP Site 7 in 1987 (Dames & Moore 1987) to assess its suitability for the proposed location of the new Fire Fighting Training Center. Soil samples were collected at the northern end of the site and analyzed for total recoverable petroleum hydrocarbons (TRPH).

### **2.2.2 Preliminary Assessment**

Following the geotechnical investigation, International Technology Corporation conducted a preliminary assessment (PA) (IT 1989a). IRP Site 7 was first identified as a part of the IRP in the PA Report. The purpose of the PA was to assess the existence of hazardous waste at IRP Site 7 attributable to its former use as a sewage treatment plant. The analytical results of the geotechnical investigation by Dames & Moore (1987) and information regarding projected land use in the foreseeable future were used to assess the magnitude of any potential environmental threat.

The PA Report concluded that the presence of petroleum hydrocarbons in soils at the site did not appear to present a significant impact on human health. No further action was recommended for the site in order to protect human health and the environment while the site remained in its current condition and used as a parking lot. However, the PA Report recommended additional characterization of soil contamination if the use of the site was to change.



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**Section 2 Site History and Enforcement Activities**

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**2.2.3 Site Inspection**

A site inspection (SI) was conducted by IT in 1991 (IT 1992). Eight volatile organic compounds (VOCs) were reported in the IRP Site 7 soil samples, along with 25 semivolatile organic compounds (SVOCs). Pesticides and the polychlorinated biphenyl (PCB) mixture Aroclor 1254 were reported in the soil samples. Chromium and lead concentrations were reported above established Naval Station San Diego background concentrations for soil. According to the 1992 SI Report, low concentrations of 1,1,1-trichloroethane, acetone, and carbon tetrachloride were reported in groundwater samples. No other organic compounds were reported in the groundwater samples. Several metals were also reported at concentrations above the contract-required detection limit in groundwater samples collected at IRP Site 7. On the basis of the data evaluated, the SI Report concluded that site-related chemicals do not pose an apparent immediate threat to human health or the environment and recommended a remedial investigation (RI) be performed to obtain the appropriate data necessary to complete a baseline risk assessment.

**2.2.4 Limited Soil Sampling and Analytical Testing**

Limited soil sampling and analytical laboratory testing were performed by Woodward-Clyde Consultants (WCC) in March 1994 (WCC 1994) before the parking lot at IRP Site 7 was regraded and paved with asphalt. Six SVOCs were reported in one soil sample collected from the east end of the site, but none of the concentrations reported in this sample exceeded residential preliminary remediation goals (PRGs). Metals were reported in all of the soil samples collected during this sampling event. Arsenic was the only metal reported in the soil samples at concentrations above the residential PRG of 0.39 milligram per kilogram (mg/kg). The reported concentrations ranged from 1.1 mg/kg to 4.0 mg/kg, and all reported arsenic concentrations were below the Naval Station San Diego background concentration of 9.05 mg/kg.

**2.2.5 Removal Site Evaluation**

A removal site evaluation (RSE) was conducted at IRP Site 7 by Bechtel National, Inc., between May 1997 and March 1998 (BNI 1998c). The purpose of the RSE was to 1) gather additional information and combine it with data from the previous investigations to assess the potential for human and environmental exposure to the hazardous substances and 2) support a decision regarding the need for a removal action at IRP Site 7. Soil and groundwater samples were collected and analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and TRPH. Benzo(a)pyrene, benzo(k)fluoranthene, Aroclor 1254 and Aroclor 1260 were identified as the risk drivers in soil. Only low concentrations of carbon tetrachloride, chloroform, and some metals were reported in the groundwater samples. The RSE Report recommended no further action.

### **2.2.6 Remedial Investigation, Human-Health Risk Assessment, and Ecological Risk Assessment**

DTSC did not concur with the RSE Report recommendation, citing as unacceptable the residential cancer risk of  $2 \times 10^{-5}$  presented in the RSE Report. DTSC requested that an RI/feasibility study be carried out and either 1) concentrations of chemicals at the site be removed or reduced or 2) land-use restrictions with institutional controls be implemented to prevent migration and/or exposure of receptors to these constituents (DTSC 1998).

An RI Report summarized data from previous investigations and recalculated the human-health risk for the residential receptor, incorporating current risk input factors. In addition to the updated human-health risk assessment (HHRA), a screening-level ecological risk assessment (ERA) and the first step of a baseline ERA were conducted in accordance with DON and U.S. EPA guidance.

RWQCB issued a letter of concurrence for no further action at IRP Site 7 on 23 June 1998. A copy of RWQCB's letter is included in Attachment A.

### **2.2.7 Request for NFA Designation**

On 07 October 2002, the DON requested an NFA determination for IRP Site 7 (BEI 2002a). RWQCB staff reviewed the available information and concurred with the DON recommendation. RWQCB issued a letter of concurrence for NFA concerning water quality at IRP Site 7 on 17 October 2002 (RWQCB 2002).

DTSC concurred with the DON determination that the risk to human health and the environment from soil appears acceptable; however, they did not concur with the recommendation of no further action for groundwater because they felt that inadequate groundwater sampling was conducted to evaluate the threat to water quality and aquatic environments (DTSC 2002a,c).

In response to DTSC's comments, five additional wells were installed in 2003 at IRP Site 7 and three additional rounds of groundwater sampling were conducted to verify previous reported concentrations in groundwater collected from the site. Soil samples were also collected from the boreholes during well installation (CDM 2003).

Table 2-2 summarizes the investigations and findings and lists report titles for activities conducted at IRP Site 7. The pertinent findings of each of the previous investigations at IRP Site 7 are discussed in detail in Section 5.

No enforcement actions are associated with IRP Site 7.

## **2.3 IRP SITE 11**

DON personnel identified IRP Site 11 as an IRP site in response to a report that IRP Site 11 was the location of a partially buried drum. Upon investigation, it was discovered that the suspect partially buried drum was actually a French drain that

## Section 2 Site History and Enforcement Activities

**Table 2-2**  
**Summary of Investigations Conducted at IRP Site 7**

Contractor/Date	Investigation	Findings	Report Title
Dames & Moore October 1987	Soil samples were collected from ten borings advanced to a maximum of 59 feet bgs and analyzed for TRPH and coliform.	IRPH in soil ranged from 20 to 7,900 mg/kg, and coliform ranged from nondetectable to 0.05 coliform per gram within the upper 5 feet of soil at the site.	Geotechnical Investigation, P-224 Brig, 32nd Street Naval Station, San Diego, California
International Technology Corporation September 1989	Available information was compiled and reviewed to assess existence of hazardous waste at IRP Sites 7 and 8.	No further action is needed at IRP Site 7 to protect human health and the environment if site remains in its current condition as a parking lot.	Final Preliminary Assessment Letter Report for Naval Station San Diego, California
International Technology Corporation September 1992	Thirty-four soil samples were collected from five borings advanced to a maximum of 21 feet bgs and from three monitoring well borings installed to a maximum of 26 feet. One groundwater sample was collected from each well.	Eight VOCs and 25 SVOCs were reported in the soil samples. Chromium and lead were reported above Naval Station background. Three VOCs and several metals were reported in the groundwater samples. There was no immediate threat to human health or the environment. Conduct an RI to gather data for a baseline risk assessment.	Final Site Inspection Report for San Diego Naval Station (Sites 2, 3, 4, 7, and 8)
Woodward-Clyde Consultants March 1994	Five soil samples were collected and analyzed for SVOCs and Title 22 metals.	Arsenic was the only compound reported at concentrations above residential PRGs. All arsenic concentrations were below Naval Station background.	Results of Analytical Laboratory Testing, A-E Contract N63387-93D-5266, Parking Lot L-116, Naval Station, San Diego, California
Bechtel National, Inc. August 1998	Sixty-nine soil samples were collected from 23 borings in June 1997. Six soil samples were collected from three borings in March 1998. Four groundwater monitoring wells were installed and sampled.	Aroclor 1254 and 1260, arsenic, hexavalent chromium, iron, lead, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene were reported in soil samples at concentrations above residential PRGs. The total cancer risk (Cal/EPA toxicity) was $2 \times 10^{-5}$ for an adult resident and industrial worker and $8 \times 10^{-7}$ for a construction worker. The HI was less than 1. No further action recommended.	Final Removal Site Evaluation, IRP Site 7, Naval Station, San Diego

(table continues)

## Section 2 Site History and Enforcement Activities

Table 2-2 (continued)

Contractor/Date	Investigation	Findings	Report Title
Bechtel Environmental, Inc. September 2002	No investigation performed. HHRA was recalculated for residential scenario.	Total cancer risk is $5.0 \times 10^{-6}$ and $8.4 \times 10^{-6}$ for risk quantified by U.S. EPA and Cal/EPA toxicity criteria, respectively. HI is 0.69.  Recommended no further action on basis of findings of the RI.	Final Remedial Investigation Report, IR Site 7, Naval Station San Diego, San Diego, California
CDM Federal Programs Corporation December 2003	Five monitoring wells were installed, three soil samples were collected, and three rounds of groundwater sampling were performed in response to DTSC comments on the PP.	Groundwater data confirmed previous groundwater analytical results. Soil analytical results would not alter outcome of risk assessment.	Data Summary Report, IRP Site 7, Naval Station San Diego, San Diego, California

## Acronyms/Abbreviations:

bgs – below ground surface  
 Cal/EPA – California Environmental Protection Agency  
 DTSC – (Cal/EPA) Department of Toxic Substances Control  
 HHRA – human-health risk assessment  
 HI – hazard index  
 IRP – Installation Restoration Program  
 mg/kg – milligrams per kilogram  
 PP – proposed plan  
 PRG – preliminary remediation goal  
 RI – remedial investigation  
 SVOC – semivolatile organic compound  
 TRPH – total recoverable petroleum hydrocarbons  
 U.S. EPA – United States Environmental Protection Agency  
 VOC – volatile organic compound

## Section 2 Site History and Enforcement Activities

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received condensate from steam lines associated with the heating and ventilation system for Building 3053. The steam lines do not come into contact with any type of hazardous materials. The radiator units are closed systems, with pressure relief valves that vent to the atmosphere, and no hazardous materials are used in their operation (Calliccoat, pers. com. 1997).

To further confirm that contaminants were not present at IRP Site 11, two investigations were conducted. Site history and investigation results indicated no release of hazardous waste at this site.

PWC conducted the first soil investigation in the vicinity of IRP Site 11 on 03 December 1993. Two soil samples were collected from 3 inches and 5 feet below ground surface (bgs) at IRP Site 11. The two soil samples were submitted for analyses of metals; total petroleum hydrocarbons (TPH) as gasoline and diesel; TRPH; pH; base, neutral, and acid (BNA) extractables; and VOCs. Contaminants were not reported in the soil samples (BNI 2000b).

The second investigation of soil and groundwater in the vicinity of IRP Site 11 was conducted by PTES on behalf of the DON. Four soil and groundwater samples were submitted for analyses of TRPH, TPH, PCBs, VOCs, SVOCs, and metals. The results indicated that the soil and groundwater adjacent to the French drain were not adversely impacted (PTES 1996).

On 27 January 1997, the DON requested NFA determination for IRP Site 11. RWQCB staff reviewed the available information and concurred with the DON recommendation. RWQCB issued a letter of concurrence for NFA at IRP Site 11 on 06 March 1997 (Attachment A).

The DON provided DTSC with copies of the PTES letter report, as-built drawings of the heating and ventilation system for Building 3053, results of a visual inspection of the ceiling and wall radiators, and responses to DTSC comments regarding the IRP Site 11 investigation. On the basis of a review of this documentation, DTSC concluded that the French drain is not a source of contamination.

On 14 October 1997, DTSC issued a letter of concurrence that no further action is needed at IRP Site 11 (Attachment A).

Table 2-3 summarizes the investigations and findings and lists report titles for activities conducted at IRP Site 11. The pertinent findings of each of the previous investigations at IRP Site 11 are discussed in detail in Section 5.

No enforcement actions are associated with IRP Site 11.

**Table 2-3**  
**Summary of Investigations Conducted at IRP Site 11**

Contractor/Date	Investigation	Findings	Report Title
Navy Public Works Center 1993	Two soil samples were submitted for metals, TPH-g, TPH-d, TRPH, BNA extractables, and VOCs.	TRPH is in soil up to 14,575.2 mg/kg	Soil Investigation for Site 11, Naval Station San Diego, California
Pacific Treatment Environmental Services, Inc. May 1996	Four groundwater samples and four soil samples were collected and analyzed for TRPH, TPH, PCBs, VOCs, SVOCs, and Title 22 metals. To allow collection of soil samples at the water table, a 60-square-foot area was excavated.	Soils and groundwater adjacent to the French drain are not adversely impacted with the tested constituents.  No further action recommended.	Letter Report for Delivery Order #0024 NAVSTA Building 3053, IR Site 11

**Acronyms/Abbreviations:**

BNA – base, neutral, and acid  
 IRP – Installation Restoration Program  
 mg/kg – milligrams per kilogram  
 NAVSTA – Naval Station San Diego  
 PCB – polychlorinated biphenyl  
 SVOC – semivolatile organic compound  
 TPH – total petroleum hydrocarbons  
 TPH-d – total petroleum hydrocarbons as diesel  
 TPH-g – total petroleum hydrocarbons as gasoline  
 TRPH – total recoverable petroleum hydrocarbons  
 VOC – volatile organic compound

## 2.4 IRP SITE 12

IRP Site 12 was part of an area used for construction of floating dry docks and barges during World War II. The construction history for this site is documented in a series of site photographs taken in 1942 and 1943 (BNI 1998b). General physical information about the site was obtained from historical aerial photograph review and evaluation. Table 2-4 presents a timeline synopsis of site conditions from 1939 through 1989 (IT 1992).

Two of these historical photographs indicated the presence of two creosote dip ponds for treatment of lumber at two locations on the site. Approximate locations for these creosote dip ponds were determined by evaluating the above-mentioned photographs and plotting them on the historical site plan from 1943. The historical site plan with the plot plan from prior investigations indicated that the historic creosote dip ponds correspond with the areas excavated during the removal action (BNI 1998b, OHM 1996).

Investigations and interviews with DON personnel indicated that the IRP Site 12 area has been used as a staging area for military equipment, automobile parking, and shipping and receiving since 1966 (BNI 1996b). IRP Site 12 was identified as an IRP site on the basis of polynuclear aromatic hydrocarbon (PAH)-impacted soil discovered there during the repair and improvement of the Brinser Street parking area by Mac General Corporation in 1992.

## Section 2 Site History and Enforcement Activities

**Table 2-4**  
**Summary of Historical Photograph Review of IRP Site 12**

Year of Photograph	Historical IRP Site 12 Conditions <sup>a</sup>
1939	The site was undeveloped.
1942-43 <sup>b</sup>	The site was part of a larger area used to construct floating dry docks and lighters (barges) in support of the war effort. Conveyor belts were used to deliver lumber for construction basins. Two creosote dipping ponds and possible dipping shed (with dark staining on surrounding soils) used to treat the lumber are identified in the area of IRP Site 12.
1966	The site appears to have had the same dimensions as it does today. Brinser and Woden Streets, the FFTF, and a railway shipping and receiving area were developed around the site. The area appears to have been used as an unpaved parking lot.
1969	The site and its use and surroundings appear similar to conditions in the 1966 photograph, except for soil staining that appears to have been related to an aboveground JP fuel tank at the northwest end of the FFTF. The staining ran northwest from a soil berm around the JP fuel tank and into the subject site. Whether the surface soil was stained with JP fuel or another substance could not be determined from the photograph.
1970	The site and its use and surroundings appear similar to conditions in the 1969 photograph. Scale and lack of clarity prevent interpretation of surface soil conditions.
1973	The site and its use and surroundings appear similar to conditions in the 1970 photograph. Soil at the southeast end of the site, near the FFTF, appears to have been moderately darker than soil in the rest of the parking area.
1974	The site and its use and surroundings appear similar to conditions in the 1973 photograph.
1978	The site and its use and surroundings appear similar to conditions in the 1974 photograph, except that Pier No. 7 was constructed to the northwest of the site.
1983	The site and its use and surroundings appear similar to conditions in the 1978 photograph, except that the soil containment berm for the JP fuel tank at the FFTF appears to have been replaced with a concrete berm.
1989	The site and its use and surroundings appear similar to conditions in the 1983 photograph.

Source: BNI 1998b

Notes:

- <sup>a</sup> historical conditions observed and noted by International Technology Corporation (1992), except where indicated
- <sup>b</sup> information obtained from Navy Public Works Center photographs

Acronyms/Abbreviations:

FFTF – Fire-Fighting Training Facility  
 IRP – Installation Restoration Program  
 JP – jet propellant

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Section 2 Site History and Enforcement Activities

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Several previous investigations have been conducted at IRP Site 12 principally to assess soil conditions before proposed military construction (MILCON) projects. Following discovery of elevated PAH, possibly creosote (in areas that were later designated Areas 1 and 2), a removal action for soils was performed. In addition, a separate site investigation at the IRP Site 8 FFTF included one soil boring within the boundaries of IRP Site 12.

A Time-Critical Removal Action Memorandum (TCRAM)/Removal Action Work Plan was prepared to document the DON's decision to perform a removal action at IRP Site 12 (BNI 1996b). The removal action was designated time critical with a planning period of less than 6 months. The DON and DTSC met on 08 March 1996 and agreed to proceed with the time-critical removal action at IRP Site 12. DTSC approved the TCRAM on 10 June 1996, and the removal action was conducted in June 1996 (OHM 1996).

The DON submitted the report, Final Expanded Site Inspection for IRP Site 12, Brinser Street Parking Area, San Diego Naval Station (BNI 1998b), to DTSC. In the report, the DON recommended, on the basis of a sitewide comprehensive postremoval data set used to characterize human-health risks, that no further action was necessary for IRP Site 12. DTSC determined that confirmatory soil analytical results and the baseline risk assessment conducted for the site showed that organic and inorganic constituents were within background and/or acceptable residential health-based standards (Attachment A). An ecological assessment was also conducted as part of the expanded site inspection (ESI).

On the basis of the information presented, on 04 September 1998, DTSC issued a letter of concurrence with the NFA recommendation for IRP Site 12 (Attachment A). RWQCB received and reviewed the aforementioned report and had no further comments with respect to IRP Site 12 (Attachment A).

Table 2-5 summarizes the investigations and findings and lists report titles for activities conducted at IRP Site 12. The pertinent findings of each of the previous investigations at IRP Site 12 are discussed in detail in Section 5.

No enforcement actions are associated with IRP Site 12.



## Section 2 Site History and Enforcement Activities

**Table 2-5**  
**Summary of Investigations Conducted at IRP Site 12**

Contractor/Date	Investigation	Findings	Report Title
International Technology Corporation November 1989	Drilled three borings to 11 feet bgs; analyzed nine samples for metals, VOCs, SVOCs, organochlorine pesticides/PCBs, cyanide, phenolics, and petroleum hydrocarbons.	Arsenic and beryllium were above PRGs.	Report of Soil Investigations at Future Site of MCON P-065. Delivery Order No. 0015. Project No. 242813
Dames & Moore April 1990	Drilled four borings to 10 feet bgs; analyzed 12 samples for metals, VOCs, SVOCs, organochlorine pesticides/PCBs, cyanide, phenolics, and petroleum hydrocarbons.	Arsenic and beryllium were above PRGs.	Final Report, Subsurface Site Investigation, DON, Proposed MILCON P-065 Site, Naval Station San Diego, CA
Benton Engineering November 1990	Drilled six borings to 63 feet bgs; analyzed 18 samples for metals, VOCs, SVOCs, organochlorine pesticides/PCBs, cyanide, and petroleum hydrocarbons.	Antimony and arsenic were above PRGs.	Soils Investigation – Proposed Dry Storage Warehouse Project, MCON P-065, Naval Supply Center, U.S. Naval Station, San Diego, CA
Mac General Corporation January 1992	Collected and analyzed two soil samples from trench for VOCs, SVOCs, organochlorine pesticides/PCBs, phenolics, and petroleum hydrocarbons.	Twelve SVOCs (PAHs) were above PRGs; 1 petroleum hydrocarbon (oil and grease) was at 52,867 mg/kg. (“Dark, tarry substance discovered in the subsurface of trench excavation. Odors reportedly smelled like creosote.”)	Improvement and Repair – North Staging and Marshaling Areas, Naval Station, San Diego, CA
International Technology Corporation June 1992	At IRP Site 8, FFTF, collected two samples from one boring (NS8-BH05) located within IRP Site 12 boundary. Analyzed for metals, VOCs, SVOCs, organochlorine pesticides/PCBs, cyanide, and petroleum hydrocarbons.	No analytes were above PRGs in NS8-BH05 samples.	Final Site Inspection Report for San Diego Naval Station
Benton Engineering November 1992	Analyzed 12 soil samples collected from trench (1.5 × 260 × 3 feet). Drilled six borings to 7.5 feet bgs. Analyzed 12 samples for metals, VOCs, SVOCs, organochlorine pesticides/PCBs, cyanide, and petroleum hydrocarbons.	Antimony, arsenic, and hexavalent chromium were at or above PRGs. TRPH was generally reported at < 100 mg/kg; however, four samples were reported at > 100 and < 1,300 mg/kg.	Supplemental Investigation – General Warehouse Addition, FY 1992 MCON Project P-065, Naval Supply Center, U.S. Naval Station, San Diego, CA

(table continues)

## Section 2 Site History and Enforcement Activities

Table 2-5 (continued)

Contractor/Date	Investigation	Findings	Report Title
OHM Remediation Services Corporation March 1996	Collected six soil samples (two background samples, BS-1 and BS-2, plus two from Area 1 and two from Area 2) at 1 foot bgs, and analyzed for VOCs, SVOCs, metals, and petroleum hydrocarbons. Collected samples as supplemental ESI data. Drilled 63 borings; analyzed 3 samples each. Locations were in grid pattern at Areas 1 and 2; samples were field-screened for PAH. Sent 30 samples to lab for confirmation SVOC analysis (20%).	Five PAHs were above PRGs; levels of arsenic and manganese were elevated above background.  Removal action was recommended.	Removal Site Evaluation, IRP Site 12, Naval Station, San Diego, CA
Bechtel National, Inc. June 1996	Prepared Time-Critical Removal Action Memorandum to document the DON's decision to conduct a removal action.	Summarized PAH contamination in soil. Calculated risk above acceptable NCP guidelines; removal action was warranted.	Final Time-Critical Removal Action Memorandum, IRP Site 12, Naval Station, San Diego, CA
OHM Remediation Services Corporation June 1997	Collected 108 and 23 samples in Areas 1 and 2, respectively, and analyzed for PAHs to assess removal effectiveness.  Excavated and transported 2,828 cubic yards of soil.  Performed human-health risk assessment to assess risk from soil left in place.	All remaining ( <i>in situ</i> ) PAHs were below PRGs.  Calculated residual risk was within acceptable NCP guidelines and below PRGs.	Draft Project Closure Report, IRP Site 12, Naval Station, San Diego, CA
Bechtel National, Inc. February 1998	Collected groundwater data and additional soil data from IRP Site 12; together with all applicable data obtained from previous investigations, performed a risk assessment of hazards posed by the chemicals of concern to human health and the environment.	No further action was recommended for IRP Site 12 on the basis of investigation results and current site use.	Final Expanded Site Inspection Report, IRP Site 12, Naval Station, San Diego, CA

Source: BNI 1998b

(table continues)

## Section 2 Site History and Enforcement Activities

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**Table 2-5 (continued)**

Acronyms/Abbreviations:

bgs – below ground surface  
DON – Department of the Navy  
ESI – expanded site inspection  
FFTF – Fire-Fighting Training Facility  
IRP – Installation Restoration Program  
mg/kg – milligrams per kilogram  
MILCON – military construction  
NCP – National Oil and Hazardous Substances Pollution Contingency Plan  
PAH – polynuclear aromatic hydrocarbon  
PCB – polychlorinated biphenyl  
PRG – preliminary remediation goal  
SVOC – semivolatile organic compound  
TRPH – total recoverable petroleum hydrocarbons  
VOC – volatile organic compound

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### Section 3

## COMMUNITY PARTICIPATION

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Thirteen IRP sites (IRP Sites 1 through 8, 10 through 13, and 20) have been or continue to be under investigation at Naval Station San Diego. A Community Relations Plan was developed to document concerns identified during community interviews and to provide a detailed program containing community relations activities planned in response to information received from the community. The initial plan was prepared in 1996 and was revised and updated in 2000 (BNI 2000a). The update incorporated the most recent assessment of community issues, concerns, and information needs related to the ongoing environmental investigation and cleanup program at Naval Station San Diego.

The community relations program includes specific activities for obtaining community input and keeping the community informed. These activities include, but are not limited to, conducting interviews; holding public meetings; issuing fact sheets and proposed plans to provide updates on current remediation and removal activities and IRP site status; maintaining an information repository at the National City Public Library, where the public can access technical documents and program information; disseminating information to the local and regional media; and holding regular Restoration Advisory Board (RAB) meetings.

### 3.1 RESTORATION ADVISORY BOARD

In April 1995, individuals from the local community began to play an increasingly significant role in the environmental restoration process with the establishment of the Naval Station San Diego RAB. Original membership in the RAB, which was solicited by the DON through paid newspaper notices, included people representing local business and industry, elected officials, local and state regulatory agencies, and the general public. The RAB currently meets quarterly at the Radisson Suites National City, 801 National City Boulevard, National City, to discuss the progress of the IRP. A number of RAB members have taken information from the regular meetings back to the local community, thus contributing to an increased awareness of the IRP process. The RAB meetings are advertised in local newspapers, and new members are welcome. In addition, members of the public can contact RAB members to obtain information or express concerns or issues to be raised at future RAB meetings.

Copies of the RAB meeting agendas, minutes, handouts, and public notices are available at the Naval Station San Diego information repository, located in the National City Public Library, 200 E. 12th Street, National City, California. In addition, RAB meeting minutes are posted on the Navy's Southwest Division Naval Facilities Engineering Command (SWDIV) environmental web page <http://www.efdswnavfac.navy.mil/Environmental/nssd.htm>.

### 3.2 FACT SHEETS

Fact sheets have been used to assure an even broader dissemination of information within the local community. These fact sheets have been prepared in basically two formats: brief, two-page fact sheets announcing removal actions and associated document

review/comment periods and public meetings; and site update fact sheets, which are longer (8 to 12 pages) periodic updates of the status of IRP sites at Naval Station San Diego. Table 3-1 summarizes the fact sheets prepared to date, the languages in which they were presented, and their respective topics. Because Naval Station San Diego is situated near a large Hispanic and Filipino community, site update fact sheets have been prepared in more than one language (usually English and Spanish, or English, Spanish, and Tagalog) to reach a larger affected community.

Fact sheets are mailed to about 377 people. In addition, fact sheets are placed in the information repository in the National City Public Library and have been distributed to several schools near Naval Station San Diego as well as other publicly accessible and well-visited community locations. They also are available online on SWDIV's environmental web page noted above.

### **3.3 COMMUNITY PARTICIPATION FOR IRP SITES 5, 7, 11, AND 12**

The final RI Report for IRP Site 7 was issued in October 2002. The Proposed Plan for IRP Sites 5, 7, 11, and 12 was distributed to all RAB members and to community members on the Naval Station San Diego project mailing list in September 2002. However, prior to its mailing, the Proposed Plan was published in its entirety in English in *The Star-News* on 30 August 2002. The Proposed Plan and the RI Report were also made available to the public at the information repository maintained at the National City Library.

The notice of availability of these documents at the information repository was published in two newspapers, the English version in the *San Diego Union-Tribune* on 29 and 31 August 2002 and the Spanish version in *El Mexicana* on 31 August 2002. The public notice was also mailed to everyone on the full community mailing list in both Spanish and English. Additionally, the notices announced the availability of the administrative record file for review.

A public comment period for the Proposed Plan for IRP Sites 5, 7, 11, and 12 was held from 03 September 2002 to 17 October 2002. In addition, a public meeting was held on 18 September 2002. This meeting was announced in the public notices distributed as discussed above.

At the public meeting, representatives from the DON, Naval Station San Diego, and environmental regulatory agencies presented information about site conditions and the no action proposal. A court recorder was available to record public comments. Mr. Douglas Bautista of DTSC provided the only public comment on the proposed plan, expressing concern that there were insufficient groundwater data to demonstrate that IRP Site 7 has not impacted groundwater or is not posing human and ecological risk (DTSC 2002c). This comment in its entirety is included in the Responsiveness Summary in this Remedial Action Plan (RAP)/Record of Decision (ROD).

## Section 3 Community Participation

**Table 3-1**  
**Summary of Naval Station San Diego Fact Sheets**

<b>Fact Sheet Title/Number</b>	<b>Date</b>	<b>Language(s)</b>	<b>Summary of Contents</b>
Removal Action #1	April 1996	English	Removal action at IRP Site 12, Brinser Street Parking Area
Removal Action #2	June 1996	English	Removal action at Site 3, Salvage Yard Parking Lot
Removal Action #3	July 1996	English	Removal action at Site 1, Ship Repair Basins
Removal Action #4	August 1996	English/Spanish	Soil removal at Naval Station San Diego, question-and-answer format, general health issues
Removal Action #5	August 1999	English	Removal action at Sub-Site 2A, Western Portion Mole Pier
Removal Action #6	February 2002	English	IRP Sub-Site 2A progress report
Pollution Prevention Newsletter	July 1997	English	Pollution prevention, recycling, and source reduction
Site Update #1	June 1995	English/Spanish	Update of sites
Site Update #2	August 1995	English/Spanish	Update of sites
Site Update #3	November 1995	English/Spanish	Update of sites and summary of IRP Site 12 site history, site conditions, and proposed removal action
Site Update #4	January 1996	English/Spanish	Update of sites
Site Update #5	March 1996	English/Spanish/ Tagalog	Update of sites
Site Update #6	July 1997	English/Spanish	Update of sites and discussion of no further action
Site Update #7	April 1998	English/Spanish	Update of sites
Site Update #8	September 1999	English/Spanish	Update of sites
Site Update #9	April 2002	English/Spanish	Update of sites

Acronym/Abbreviation:

IRP – Installation Restoration Program

The DON has included investigation reports, sampling and analysis information, and other documents that were referenced to select the appropriate action for the four sites in the administrative record file. The complete administrative record file is available for public review at SWDIV, located at 1220 Pacific Highway, San Diego, California. The Administrative Record Coordinator's telephone number is (619) 532-3676. A copy of the administrative record file index for IRP Sites 5, 7, 11, and 12 is included with this document as Attachment B.

### **3.4 COMMUNITY PARTICIPATION FOR IRP SITE 12 BEFORE PROPOSED PLAN**

Additional community participation specific to IRP Site 12 occurred in 1995 because of the removal action performed in 1996. In addition to regulatory review, a RAB technical subcommittee reviewed the RSE Work Plan (OHM 1995) for IRP Site 12 and presented the results of their review to the RAB at their 27 September 1995 meeting (RAB 1995). The site history, site conditions, and proposed removal action for IRP Site 12 were briefly described in the November 1995 site update Fact Sheet No. 3 (SWDIV 1995). Subsequently, the public was involved in the removal action conducted at IRP Site 12.

The DON chose to follow the public-participation requirements of a non-time-critical removal action to encourage public involvement, although, under normal circumstances, a time-critical removal action does not require public review before the project commences. The IRP Site 12 removal action was the subject of the April 1996 Removal Action Fact Sheet No. 1 (SWDIV 1996). The preliminary final ICRAM/Removal Action Work Plan for IRP Site 12 was made available to the public in April 1996. A public review and comment period was held between 24 April and 24 May 1996. A public notice announcing the comment period was placed in *The Star-News*, Removal Action Fact Sheet No. 1 was mailed to more than 300 nearby residents and businesses, and fact sheets were sent home with 1,000 students from nearby Kimball and Perkins elementary schools.

A public meeting was held on 26 April 1996 to discuss the proposed removal action. At this meeting, the public provided input to the DON, and representatives from the DON and DTSC answered questions. DON's response to the comments received during this period is in the Comment/Resolution matrices included with the final ICRAM/Removal Action Work Plan for IRP Site 12 (BNI 1996b).



## Section 4

# SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION

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A site (i.e., a military installation) is often divided into a number of operable units for cleanup management purposes, depending on the complexity of the problems associated with the site. However, because of the discrete nature of the IRP sites at Naval Station San Diego, operable units have not been assigned.

There are 20 IRP sites, consisting of 13 primary IRP sites and 7 SWMUs, at Naval Station San Diego. The primary IRP sites are 12 of the 13 original PA/SI sites and one of the SWMUs that is administered under the DON's IRP in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The remaining six of the seven SWMUs are administered separately under the Resource Conservation and Recovery Act Program.

In addition, there are former UST sites being investigated at Naval Station San Diego that have been organized into 16 groups. Although these are not IRP sites, the former USTs are actively being investigated or remediated because of potential contamination (BNI 1995a).

IRP Sites 5, 7, 11, and 12 are designated primary IRP sites at Naval Station San Diego. IRP Sites 5 and 11 were investigated as part of a preliminary site identification program. Subsequent investigations revealed that there was no evidence of a release at either site. Therefore, these two sites are considered "no release" sites and are recommended for no action in this RAP/ROD. Several investigations and a removal action for soils have been conducted at IRP Site 12. Subsequent to the removal action, an ESI for soil and groundwater, including a human-health and ecological risk assessment, was conducted at IRP Site 12 that showed organic and inorganic constituents were within background and/or acceptable residential, industrial, and construction worker health-based standards. DTSC and RWQCB concurred that no further evaluations or cleanup actions are required at IRP Sites 5, 11, and 12.

IRP Site 7 is the only site addressed in this RAP/ROD that has progressed through an RI. Before the RI, investigations were conducted at the site between 1987 and 1998. A supplemental groundwater investigation was also conducted in 2003 to verify previous analytical results in response to DTSC's concern expressed at the Proposed Plan stage for this site. On the basis of the risk assessment results for human health and the environment, the low concentrations of VOCs and metals in the groundwater, and the location and distribution of chemicals contributing to risk in soil, the DON recommends no further action for IRP Site 7 in this RAP/ROD.

The remaining IRP sites at Naval Station San Diego are currently undergoing or have completed investigation, removal, or remedial action and will be addressed in future decision documents.

Section 4 Scope and Role of Operable Unit or Response Action

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## Section 5

# SITE CHARACTERISTICS

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Three of the four sites included in this RAP/ROD, IRP Sites 7, 11, and 12, are along the eastern shore of San Diego Bay at Naval Station San Diego. The regional characteristics of Naval Station San Diego presented below in Section 5.1 apply to these three sites. IRP Site 5, the Admiral Baker Golf Course Landscaping-Debris Landfill, is inland on a satellite property of Naval Station San Diego approximately 10 miles to the north. Regional and site-specific characteristics of IRP Site 5 are discussed in Section 5.2.

### 5.1 REGIONAL CHARACTERISTICS OF IRP SITES 7, 11, AND 12

The topography, climate, geology, hydrogeology, surface hydrology, and sensitive environments at Naval Station San Diego are discussed in the following subsections.

#### 5.1.1 Topography and Climate

Much of the waterfront property at Naval Station San Diego is reclaimed marshland and tidal flats. Naval Station San Diego is characterized by low relief topography, with the portion east of Harbor Drive gently sloping toward the west.

The climate of Naval Station San Diego is semiarid subtropical (Mediterranean type). The average temperature ranges from 52 to 70 degrees Fahrenheit (°F) (NWS 1998). The average monthly temperature is 60 °F. Occasional Santa Ana winds bring dry, warm air from the east during the fall and winter seasons (RECON 1996). The highest temperatures are generally associated with Santa Ana winds. Temperatures above 90 °F and below 40 °F are infrequent. The average humidity is 76 percent, and the average annual rainfall is 9 to 10 inches. Eighty-five percent of the rainfall occurs in the winter months from December through April (NWS 1998). Summer and fall intrusions of subtropical moisture occasionally occur, but rainfall is not generally significant.

#### 5.1.2 Geology

Naval Station San Diego is within the Peninsular Ranges Geomorphic Province of southern California. The Peninsular Ranges are characterized by northwest-trending fault zones and similarly trending ridges and valleys. Much of the Naval Station San Diego area west of Harbor Drive is underlain by hydraulically emplaced fill. This fill was dredged from San Diego Bay and placed around the margins of the bay to create new land areas. Local areas of conventionally emplaced fill are also present throughout the station. Bay deposits are present below the filled areas along previous bay margins. The Bay Point Formation underlies the bay deposits.

Before the development of Naval Station San Diego, the general area consisted of tidal flats, marshes, small ponds and lagoons, and relatively flat-lying, vegetated, coastal plain traversed by meandering creeks and drainages leading to the bay. Generally, the wet-side areas (i.e., west of Harbor Drive, including IRP Sites 7, 11, and 12) are underlain by artificial fill soil, whereas the dry-side areas (i.e., east of Harbor Drive) are underlain by native deposits.

### 5.1.3 Hydrogeology

Naval Station San Diego is within the Paradise and El Toyon Hydrologic Subareas of the National City Hydrologic Area in the Pueblo San Diego Hydrologic Unit (RWQCB 1995). The section of the National City Hydrologic Area west of Interstate Highway 5 (which includes the entire base) has no beneficial groundwater uses, according to the RWQCB San Diego Region Water Quality Control Plan for the San Diego Basin (RWQCB 1995). Unconfined groundwater occurs throughout Naval Station San Diego from approximately 7 to 20 feet bgs. Local groundwater elevations range from mean sea level (MSL) near the shoreline to a few feet above MSL near the east side of Naval Station San Diego (PWC 1999).

### 5.1.4 Surface Hydrology

The RWQCB San Diego Region Water Quality Control Plan (RWQCB 1995) lists existing beneficial uses for coastal surface water that include industrial, navigational, recreational, commercial, and sport fishing as well as several ecological categories. The listed ecological uses for coastal surface water are estuarine habitat; wildlife habitat; rare, threatened, or endangered species habitat; marine habitat; migration of aquatic organisms; and shellfish harvesting.

Naval Station San Diego is in the Coastal Plain Zone and lies within the Las Chollas drainage basin that includes Las Chollas, South Las Chollas, Switzer, and Paleta Creeks. Those creeks (except Switzer Creek) pass through Naval Station San Diego property. Urbanization (buildings and pavement) within the Las Chollas, South Las Chollas, Switzer, and Paleta Creek watersheds has significantly decreased the amount of natural soil cover once available for direct infiltration of precipitation and has increased the amount of surface runoff and flooding during storms.

Surface water runoff at Naval Station San Diego discharges to San Diego Bay either through the DON-owned and -maintained storm drain system or via the Las Chollas and Paleta Creeks that drain into the bay. The two creeks consist of unlined channels within the confines of the base, and both have been dredged and widened west of Harbor Drive. Because IRP Sites 7 and 12 are entirely paved, essentially all of the surface water discharges as sheet flow runoff to drainage swales along streets and into the base storm drain system.

### 5.1.5 Sensitive Environments

Although no sensitive environments are at IRP Sites 7, 11, and 12, sensitive environments exist in San Diego Bay. The San Diego Bay area contains seven marine and six terrestrial habitat/vegetation types, categorized according to depth or elevation. The marine habitat areas along with adjacent terrestrial (above the extreme high-tide line) habitats are an integral part of the food web for nearby ocean water inhabitants. The marine and tideland areas of San Diego Bay serve as habitat for a variety of birds, fish, shellfish, marine mammals, and vegetation. At least 100 species of marine and terrestrial

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**Section 5 Site Characteristics**

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plants have been identified. More than 60 species of fish, 200 species of resident or migratory birds, and at least 200 species of marine invertebrates, including clam, lobster, crab, and shrimp, are represented (RECON 1996).

Southern coastal salt marsh, a U.S. Army Corps of Engineers jurisdictional wetland habitat, is recognized as a sensitive habitat type and is among the rarest of native habitats in southern California (Holland 1986).

Five sensitive species were observed at Naval Station San Diego: the federal and state listed endangered California brown pelican, the state listed endangered peregrine falcon, and three California Department of Fish and Game species of special concern (double-crested cormorant, long-billed curlew, and loggerhead shrike) (RECON 2002). In addition, the California least tern potentially forages in the bay, adjacent to Naval Station San Diego.

Less than 1 mile south of the base is the Paradise Creek/Sweetwater River Complex, a marsh and river system that is a significant wetland habitat. Its proximity to a heavy concentration of bayfront industrial activities makes it vulnerable to intrusion and degradation from industrial pollutants, noise, and traffic (RECON 1996).

## **5.2 IRP SITE 5**

This section discusses the regional and site-specific characteristics of IRP Site 5 as well as the pertinent findings of investigations conducted at the site.

### **5.2.1 Topography**

The Admiral Baker Golf Course is several miles southwest of Mission Gorge in the lower portion of the San Diego River Valley. Elevations near the site range from approximately 90 feet above MSL at the San Diego River just to the south of the site to approximately 165 feet above MSL at the top of the landfill (JEG and IT 1993). The landfill is at the base of steeply sloped hills to the west and north. The terrain east and south of the site is much flatter as the golf course is in the San Diego River floodplain.

### **5.2.2 Geology and Hydrogeology**

Quaternary alluvium and slopewash infills the San Diego River Valley underlying the Admiral Baker Golf Course (NEESA 1986). These recent deposits, consisting of poorly consolidated sand, gravel (cobbles), and silt, occupy the low area of the site. The topography rises abruptly along the western and northern boundaries, where the Tertiary-age Friars Formation and Stadium Conglomerate are present. The Friars Formation consists of yellowish-gray, medium-grained, poorly consolidated sandstone. The tops of the prominent hills west and northwest of the site are capped by the Tertiary-age Stadium Conglomerate, a gray to yellowish-brown sand and cobble-bearing unit that is highly resistant to erosion (JEG and IT 1993).

Geologic structure in the San Diego area is not particularly complex; most formations remain close to their original horizontal (i.e., deposition) attitudes. Several important

faults are present within a 10-mile radius of the Admiral Baker Golf Course, but no faults are within the site boundaries.

Groundwater adjacent to the San Diego River in the vicinity of the Admiral Baker Golf Course is generally 10 feet bgs. However, because IRP Site 5 is on the shallow hills/slope next to the low-lying floodplain sediments, groundwater exists 45 to 75 feet bgs in this area. Groundwater appears to be unconfined within the alluvium and flows toward the San Diego River in a south-southwest direction, which represents the local groundwater base level. Groundwater in the shallow aquifer is naturally high in total dissolved solids and is not used for domestic purposes (JEG and IT 1993). This section of the San Diego Hydrogeologic Unit is designated as having potential beneficial uses for municipal purposes (RWQCB 1995).

### 5.2.3 Surface Hydrology

Surface drainage at the Admiral Baker Golf Course is south-southwest toward the low area defined by the San Diego River channel. Percolation is probably moderate because of the permeability of the alluvial sediments underlying the site (JEG and IT 1993). The San Diego River lies about 2,000 feet south of IRP Site 5. The San Diego River provides local riparian habitat in the San Diego area and is used only for recreational purposes. Numerous perennial ponds created by former sand-borrow operations occur in the riverbed upstream and downstream of the golf course. The ponds are fed by groundwater during the dry season and flooded by stormwater during the rainy season. The river eventually discharges approximately 10 miles downstream into the Pacific Ocean near Mission Bay (NEESA 1986).

### 5.2.4 Sensitive Environments

Four native vegetative communities along with areas of ruderal vegetation and landscaping are present within the Mission Gorge Recreational Facility (MGRF) (RECON 2002). The associated fauna of the area varies from small rodents, rabbits, birds, and reptiles to coyote and occasionally mule deer (NEESA 1986). Vernal pools have not been reported at IRP Site 5; however, vernal pools are present in the surrounding area (NEESA 1986).

IRP Site 5 is located in an area of MGRF classified as Diegan coastal sage scrub. Diegan coastal sage scrub is classified by the Natural Diversity Database as rare and sensitive habitat because it is the preferred nesting habitat of the federally listed coastal California gnatcatcher. Although not specifically identified on IRP Site 5, this species was observed in the coastal sage scrub of MGRF (RECON 2002).

Additionally, in the vicinity of IRP Site 5, approximately 13 acres of riparian habitat is supported with patchy distribution on and adjacent to the golf course. This is the habitat for the least Bell's vireo, a small migratory songbird that nests along rivers in southern California. This bird is in jeopardy of extinction due to habitat loss and is a federally endangered species.

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## Section 5 Site Characteristics

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A San Diego River Habitat Conservation Plan was prepared in December 1988 for the San Diego Association of Governments as part of the Comprehensive Species Management Plan for the federally endangered least Bell's vireo. In the Conservation Plan, Admiral Baker Field is in Reach I – City of San Diego, on Administrative Parcel No. AP-3 of the focused planning area (SANDAG 1988).

### 5.2.5 Site History

Landscaping debris was disposed at IRP Site 5 between approximately 1965 and 1980. Reportedly, the site was used primarily for the disposal of organic grounds maintenance waste (e.g., grass, brush, and tree trimmings). Visual inspections of the site in 1985, 1992, and 1993 revealed that a variety of wastes, including concrete demolition debris, scrap metal, and refuse, also had been disposed at the landscaping-debris landfill (NEESA 1986, JEG and IT 1993).

### 5.2.6 Site Investigations

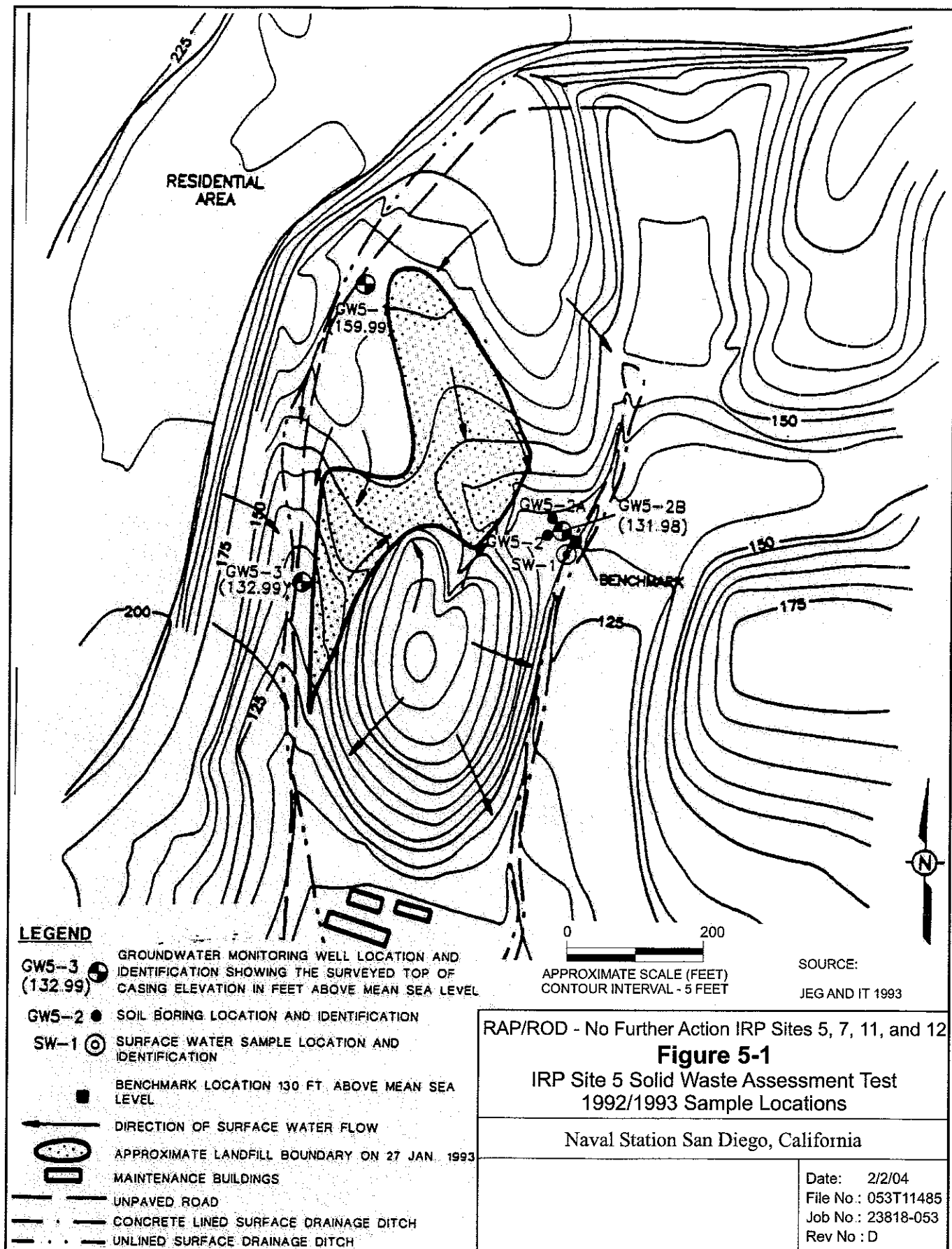
During a September 1985 site visit conducted as part of the IAS, the site was heavily overgrown. The IAS Report concluded, the volume and nature of the wastes disposed at the golf course indicated that IRP Site 5 was not likely to pose any current or future threat to residents in the surrounding housing area or to the environment. No sampling was conducted as part of the IAS, and a confirmation study (which typically does include sampling) was not recommended for IRP Site 5 (NEESA 1986).

#### 5.2.6.1 SOLID WASTE ASSESSMENT TEST

In 1992 and 1993, Jacobs Engineering Group Inc. (JEG), conducted a SWAT at IRP Site 5 in compliance with the *California Code of Regulations* (Cal. Code Regs.) Title (tit.) 23, Chapter (ch.) 3, Subchapter 15, as required by SWRCB. The purpose of the SWAT was to determine whether the landscaping-debris landfill may have potentially impacted groundwater.

Three soil borings were advanced in September 1992, and nine soil samples were collected at approximately 10-foot intervals and whenever changes in lithology were observed. Three monitoring wells were installed, and groundwater samples were collected for laboratory analysis during four quarterly sampling rounds (Figure 5-1). A surface water sample was also collected from an adjacent concrete drainage ditch as part of the initial SWAT sampling round. Groundwater samples were also collected for laboratory analysis during a fifth sampling round conducted on 12 June 1996 by PWC (Laboratory Data Consultants, Inc. 1996).

The soil, groundwater, and surface water analytical results for IRP Site 5 are summarized in Tables 5-1, 5-2, and 5-3, respectively, and are discussed below.





## Section 5 Site Characteristics

**Table 5-1**  
**Summary of Soil Data<sup>a,b</sup>, IRP Site 5**

Chemical	Number of Analyses	Number of Detections	Range of Positive Detections
<b>Volatile Organic Compounds (µg/kg)</b>			
methylene chloride	9	7	10 X-37 X
<b>Semivolatile Organic Compounds (µg/kg)</b>			
bis(2-ethylhexyl)phthalate	9	9	31 B,J-543 B
di-n-butyl phthalate	9	9	92 B,J-667 B
diethyl phthalate	9	3	14 J-31 J
<b>Total Recoverable Petroleum Hydrocarbons (mg/kg)</b>	9	1	5 J
<b>Total Metals (mg/kg)<sup>c</sup></b>			
aluminum	7	7	35.9-311
arsenic	7	7	0.28-4.30
barium	7	7	25.7-227
beryllium	7	7	0.14-0.62
cadmium	7	7	0.45 B-3.72
calcium	7	7	8.75 B-340
chromium	7	7	5.38-37.6
cobalt	7	7	1.55 E-16.7
copper	7	7	5.16-37.7
iron	7	7	54.2-385
lead	7	7	0.55-4.45
magnesium	7	7	15.0 B-129
manganese	7	7	60.8-749
nickel	7	7	2.48 E-15.4 E
potassium	7	7	651-6,730
selenium	3	1	0.27 B
sodium	7	7	1.13 B-13.2 B
silver	1	1	0.25 E
thallium	7	4	0.10-0.37
vanadium	7	7	15.9-86.8
zinc	7	7	15.0-110

(table continues)

**Table 5-1** (continued)

Source: JEG and IT 1993

Notes:

- <sup>a</sup> only reported concentrations are included in the summary
- <sup>b</sup> TICs are not included in the summary; all TIC values are estimated values, compounds reported in the laboratory blanks, and/or products of laboratory control limit problems; therefore, they are not considered to be representative of the samples
- <sup>c</sup> metals data were originally reported in µg/kg; values have been rounded and are now reported in mg/kg

Acronyms/Abbreviations:

IRP – Installation Restoration Program  
µg/kg – micrograms per kilogram  
mg/kg – milligrams per kilogram  
TIC – tentatively identified compound

Review Qualifiers:

B – the analyte was found in both the laboratory blank and the sample  
E or J – estimated value less than the quantitation limit but greater than zero  
X – the analyte was found in the method blank, indicating possible laboratory contamination

## Soil Analyses

Vadose-zone soil samples were analyzed for priority pollutant metals, VOCs, SVOCs, IRPH, pesticides, and PCBs. Pesticides and PCBs were not found in any of the samples. The results of the reported analyte concentrations are summarized below.

- **Metals** – All metals concentrations were below hazardous levels as defined in Cal. Code Regs. tit. 22, Article 3, Section (§) 66261. Most sample concentrations were below the 1993 industrial PRG soil concentrations; however, seven of the nine samples contained reported concentrations of arsenic and/or barium above the 1993 residential PRG soil concentrations.
- **VOCs** – Only one VOC, methylene chloride, was reported in the nine soil boring samples. However, methylene chloride was also reported in the field rinsate blank and the trip blank, suggesting that laboratory contamination was responsible for the presence of this analyte in the soil samples.
- **SVOCs** – Up to three SVOCs (bis[2-ethylhexyl]phthalate, di-n-butyl phthalate, and diethyl phthalate) were reported in three of the nine soil boring samples. Two of the three SVOCs were considered to be the result of laboratory and/or sampling contamination, and the third SVOC was reported by the laboratory as an estimated value.
- **TRPH** – TRPH was reported in only one sample at a concentration below the method quantitation limit.

## Section 5 Site Characteristics

**Table 5-2**  
**Summary of Groundwater Data<sup>a,b</sup>, IRP Site 5**  
**(units reported in micrograms per liter)**

Chemical	Number of Analyses	Number of Detections	Range of Positive Detections
<b>Volatile Organic Compounds</b>			
acetone	20	5	15.7 J,B–19.4 J,B
methylene chloride	20	4	5.94 B–9.02 B
ethylbenzene	20	1	2.02 J,X
toluene	20	1	11.95
total xylenes	20	1	15.01
<b>Semivolatile Organic Compounds</b>			
bis(2-ethylhexyl)phthalate	20	15	1.63 J B–20.19 B
di-n-butyl phthalate	20	16	1.1 J B–13.3 B
2-methylnaphthalene	20	1	1.9 J
naphthalene	20	1	4.7 J
2-nitroaniline	20	1	10.01
<b>Total Recoverable Petroleum Hydrocarbons</b>	20	5	250–1,200 B
<b>Total Metals</b>			
aluminum	20	20	930–712,000
arsenic	20	16	2 B,N,E–36
barium	20	19	63–12,800
beryllium	20	1	10
cadmium	20	11	33–119
calcium	20	20	108,000–462,000
chromium	20	17	5 B–374
cobalt	20	11	18–209
copper	20	16	10 B–549
iron	20	20	2,400–581,000
lead	20	13	1.01 B–97
magnesium	20	20	61,000–302,000
manganese	20	19	105–6,480
mercury	20	9	0.2–2
molybdenum	20	7	12 E–17
nickel	20	11	11–100
potassium	20	20	2,690 B–55,000
selenium	20	8	5–16
silver	20	1	2 B

(table continues)

Table 5-2 (continued)

Chemical	Number of Analyses	Number of Detections	Range of Positive Detections
sodium	20	20	352,000–992,000
thallium	20	3	0.1 B–0.7 B
vanadium	20	16	15–1,060
zinc	20	19	16–862
<b>Dissolved Metals</b>			
aluminum	16	2	170–2,200
antimony	16	1	2 B
arsenic	16	8	0.7–2 B
barium	16	10	65–229
calcium	16	15	96,000–396,000
copper	16	7	14–74
iron	16	6	16 B–3,200
lead	16	4	0.86 B–8.09
magnesium	16	16	55,000–244,000
manganese	16	11	22–496
mercury	16	2	0.2–0.3
molybdenum	16	2	18 E–25 E
nickel	16	2	14 B–19 B
potassium	16	16	1,930–14,000
selenium	16	11	5–15
sodium	16	16	376,000–1,190,000
zinc	16	12	24–694

**Notes:**

- <sup>a</sup> only reported concentrations from the 1993 SWAT Report (JEG and IT 1993) and the 1996 Data-Validation Report (Laboratory Data Consultants, Inc. 1996) from Navy Public Works Center's 1996 sampling are included in the summary
- <sup>b</sup> TICs are not included in the summary; all TIC values are estimated values, compounds reported in the laboratory blanks, and/or products of laboratory control limit problems; therefore, they are not considered to be representative of the samples

**Acronyms/Abbreviations:**

IRP – Installation Restoration Program  
 SWAT – solid waste assessment test  
 TIC – tentatively identified compound

**Review Qualifiers:**

B – the analyte was found in both the laboratory blank and the sample  
 E or J – estimated value less than the quantitation limit but greater than zero  
 N – spike sample recovery not within control limits  
 X – the analyte was found in the method blank, indicating possible laboratory contamination

## Section 5 Site Characteristics

**Table 5-3**  
**Summary of Surface Water Data<sup>a,b</sup>, IRP Site 5**  
 (units reported in micrograms per liter)

Chemical	Number of Analyses	Number of Detections	Reported Value
<b>Volatile Organic Compound</b>			
methylene chloride	1	1	5.67 B
<b>Semivolatile Organic Compounds</b>			
bis(2-ethylhexyl)phthalate	1	1	4.95 J,B
butyl benzyl phthalate	1	1	0.85 J,B
diethyl phthalate	1	1	0.96 J
di-n-butyl phthalate	1	1	7.34 J,B
<b>Total Recoverable Petroleum Hydrocarbons</b>	1	1	700 J
<b>Total Metals</b>			
aluminum	1	1	18,200
antimony	1	1	21 B
barium	1	1	177 B
calcium	1	1	21,100
chromium	1	1	24
copper	1	1	49
iron	1	1	19,300
lead	1	1	13.9
magnesium	1	1	9,230
manganese	1	1	518
potassium	1	1	4,130 B
sodium	1	1	13,000
vanadium	1	1	64
zinc	1	1	141

Source: JEG and IT 1993

Notes:

<sup>a</sup> only reported concentrations are included in the summary

<sup>b</sup> TICs are not included in the summary; all TIC values are estimated values, compounds reported in the laboratory blanks, and/or products of laboratory control limit problems; therefore, they are not considered to be representative of the samples

Acronyms/Abbreviations:

IRP – Installation Restoration Program

TIC – tentatively identified compound

Review Qualifiers:

B – the analyte was found in both the laboratory blank and the sample

J – estimated value less than the quantitation limit but greater than zero

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### **Groundwater Analyses**

JEG collected groundwater samples on a quarterly basis from the three monitoring wells between November 1992 and July 1993. A duplicate groundwater sample was also collected during each monitoring event. One upgradient well (GW5-1) and two downgradient wells (GW5-2B and GW5-3) were installed in accessible locations at the margins of the landscaping-debris landfill. Groundwater samples were submitted for laboratory analyses of total and dissolved priority pollutant metals, VOCs, SVOCs, TRPH, pesticides, and PCBs. Pesticides and PCBs were not found in the samples. As part of the SWAI, the quarterly groundwater monitoring results were statistically evaluated and tolerance limits were determined. The tolerance limits were used to determine whether sample results were statistically different from background samples and, therefore, of concern. The results of the reported concentrations are summarized as follows.

- **Metals** – The reported total metals concentrations were generally within tolerance limits established from upgradient well GW5-1 results. In some cases, reported metals results exceeded their respective 1993 tap water PRGs or maximum contaminant levels (MCLs). However, the exceedances also occurred in upgradient well GW5-1; therefore, they were considered to represent background concentrations and/or laboratory contamination. The reported dissolved metals concentrations were within tolerance limits except for one result, which was attributed by JEG to a temporary condition.
- **VOCs** – Two VOCs were consistently reported in the well samples. The VOCs, acetone and methylene chloride, were also reported in the laboratory blanks, suggesting laboratory contamination. Low concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported during one round; however, these compounds were not reported in subsequent rounds and were believed to be related to laboratory contamination.
- **SVOCs** – Four SVOCs were reported just above the detection limits. Only 2-nitroaniline (10.01 micrograms per liter [ $\mu\text{g/L}$ ]) in the first-quarter sample from GW5-1 (the upgradient well) was not qualified by the laboratory as an estimate or identified in the laboratory blank.
- **TRPH** – TRPH was reported in one of the first-quarter samples at a concentration of 600  $\mu\text{g/L}$  in well GW5-2B. This concentration was just above the detection limit of 500  $\mu\text{g/L}$ . TRPH was not reported in any other groundwater sample at any time during the investigation.

### **Surface Water Analyses**

One surface water sample (and a duplicate sample, which was not analyzed by the laboratory) was collected as part of the investigation to monitor the discharge surface runoff water from the landscaping-debris landfill. This sample was collected from the concrete drainage ditch east of the landscaping-debris landfill in an area where landscaping-debris landfill surface water was observed entering the drainage ditch. The surface water sample was analyzed for priority pollutant metals, VOCs, SVOCs, TRPH,

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## Section 5 Site Characteristics

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pesticides, herbicides, and PCBs. Pesticides, PCBs, and herbicides were not reported in the sample. The results of the reported concentrations are summarized as follows.

- **Metals** – All metals concentrations were below 1993 tap water PRGs except for antimony (21 µg/L) and lead (13.9 µg/L), which exceeded their respective tap water PRGs (15 µg/L and 4 µg/L).
- **VOCs** – Methylene chloride was the only VOC reported. (It was also reported in the laboratory blank.)
- **SVOCs** – Four SVOCs were reported; however, these four SVOCs were also reported in the laboratory blank.
- **TRPH** – IRPH was reported at 700 µg/L, just above the detection limit of 500 µg/L, and the result was flagged by the laboratory as an estimate.

As a result of the investigation, the SWAT led to the conclusion that no remedial measures were necessary at that time.

### 5.2.6.2 PWC FIFTH-ROUND GROUNDWATER SAMPLING

Groundwater samples were collected for laboratory analyses during a fifth sampling round conducted by PWC in June 1996. No VOCs, SVOCs, pesticides, or PCBs were found in the samples. Total and dissolved priority pollutant metals and TRPH were reported in the samples. The results of the reported concentrations are summarized as follows.

- **Metals** – Total metals concentrations were reported to be below those reported during the SWAT sampling events except for sodium, which was reported at concentrations as high as 992,000 µg/L. All but four of the reported dissolved metals concentrations were within the range of positive detections reported during the SWAT sampling event. Dissolved aluminum, iron, potassium, and sodium were reported at concentrations higher than those found during the SWAT but did not exceed their respective tap water PRGs. Dissolved aluminum was reported to be 2,200 µg/L (above the MCL) in a groundwater sample identified as NS5-MW02B-GW10-01; however, dissolved aluminum was not reported in a duplicate sample identified as NS5-MW02A-GW10-01.
- **TRPH** – IRPH was reported in all groundwater samples and also in the quality control samples.

## 5.3 IRP SITE 7

The following subsections discuss the geology, hydrogeology, investigations, nature and extent of contamination, and potential migration pathways at IRP Site 7.

### 5.3.1 Hydrogeology and Geology

The stratigraphy at IRP Site 7 was interpreted from boring log information obtained from previous investigations. The deepest boring advanced at IRP Site 7 was to 35 feet bgs.

Most borings were drilled to approximately 20 feet bgs. The boring logs reflect the site's developmental history, having been developed with hydraulically placed fill and subsequently graded and paved.

The subsurface soil generally consists of heterogeneous mixtures of silty sand, sandy gravel, and smaller amounts of well-graded sand and silty clay. The sandy gravel occurs from 3 inches bgs, just beneath the asphalt pavement, to approximately 1.5 feet bgs throughout the site. This sandy gravel was conventionally placed in 1994 as a subgrade for the asphalt parking lot. Silty sand underlies the sandy gravel and extends to approximately 20 feet bgs, the maximum depth explored in many of the boreholes. This silty sand is interpreted as hydraulically placed/dredged fill that originated from San Diego Bay. Small amounts of shell fragments were noted throughout the silty sand layer. Well-graded sands and silty clays were noted in some of the boreholes at greater than 5 feet bgs. Except for the sandy gravel to 1.5 feet bgs, the distribution of lithologic units at IRP Site 7 appears to be random. The SI conducted in 1992 reported construction debris in borings at the north and west ends of the site. Concrete was also encountered in boring SB-20 at 4 feet bgs during the RSE. When monitoring wells were drilled during the supplemental groundwater investigation in 2003, concrete was encountered at 4.5 feet bgs at the original location of well MW10. Additionally, organic silt with a strong septic odor was encountered in the borehole for well MW08 from 3.5 feet bgs to approximately 15 feet bgs and was identified as possible sewage sludge by the field geologists.

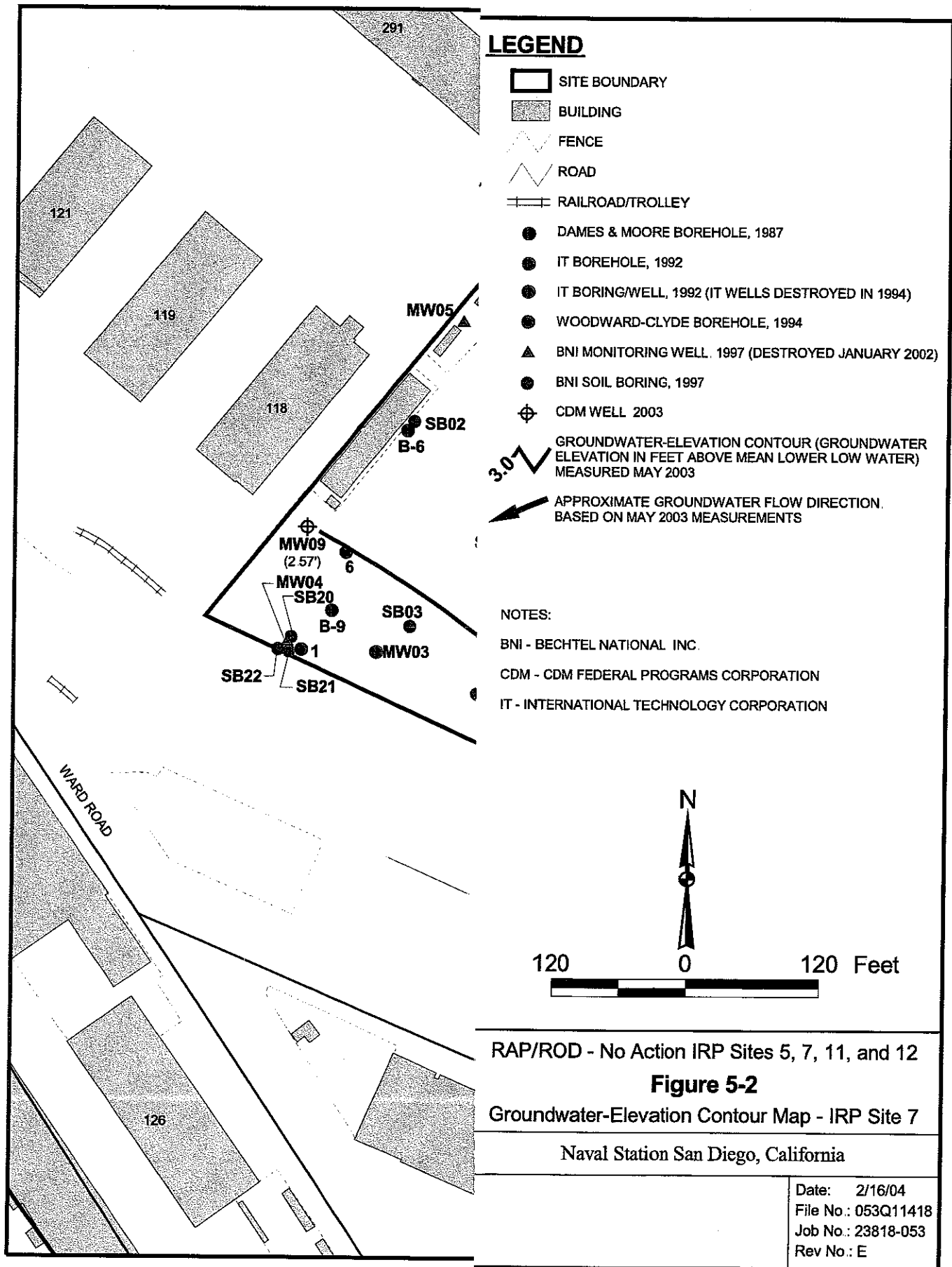
The depth to groundwater measured in IRP Site 7 wells has ranged from approximately 11.7 to 17.6 feet bgs. Three wells, MW01 through MW03, were installed in 1991 during the SI and abandoned in 1994 when the site was regraded. Four wells, MW04 through MW07, were installed during the RSE and properly destroyed in January 2002 (BNI 2002). The five wells currently in place, MW08 through MW12, were installed in May 2003.

The most recent groundwater-elevation data from new monitoring wells installed in May 2003 indicate that flow direction at the site varies and is generally toward the south to southwest across the site. The groundwater gradient was approximately 0.002 foot per foot (ft/ft) during the May sampling event (Figure 5-2). Somewhat in contrast, the groundwater flow direction was previously estimated, on the basis of groundwater-elevation data from wells installed during the RSE in 1997, to be more toward the north-northwest. The difference in flow directions may be attributed to the relatively low gradient at the site. With a flat gradient, a minor change in groundwater elevation or an anomalous measurement can produce a large apparent shift in flow direction.

### 5.3.2 Site Investigations

The following subsections are reviews of IRP Site 7 investigations.







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Section 5 Site Characteristics

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**5.3.2.1 GEOTECHNICAL INVESTIGATION**

A geotechnical investigation was performed at IRP Site 7 in 1987 (Dames & Moore 1987). Six soil samples at the northern end of the site, collected between 2 and 5 feet bgs, were analyzed for TRPH and coliform bacteria (Table 5-4). All other soil testing was for geotechnical parameters. Reported TRPH concentrations ranged from 20 to 7,900 mg/kg. The greatest TRPH concentrations were reported in the soil samples collected from borings B-4 and B-7. These borings are in the north-central portion of the site (Figure 5-2). Presence of coliform bacteria was reported in only one of the six samples (boring B-3) at a concentration of 0.05 coliform colonies per gram.

**5.3.2.2 PRELIMINARY ASSESSMENT**

IT conducted a PA at IRP Site 7 in 1989 (IT 1989a). The analytical results of the prior field investigation by Dames & Moore (1987) were used together with information regarding projected land use in the foreseeable future to assess the magnitude of any potential environmental threat. The PA Report concluded that the presence of petroleum hydrocarbons in soils at the site did not appear to present a significant impact on human health. No further action was recommended for the site in order to protect human health and the environment while the site remained in its current condition and use as a parking lot. However, the PA Report recommended additional characterization of soil contamination if the use of the site was to change.

**5.3.2.3 SITE INSPECTION**

IT conducted an SI in 1991 that included IRP Site 7 (IT 1992). Three monitoring wells were installed at IRP Site 7 during the SI and abandoned in 1994. Thirty-four soil samples and three groundwater samples were collected from five soil borings and the three wells (Table 5-5 and Figure 5-2). The SI soil and groundwater samples were analyzed for VOCs, SVOCs, organochlorine pesticides/PCBs, and metals. Eight VOCs were reported in the IRP Site 7 soil samples along with 25 SVOCs. Pesticides, including 4,4'-dichlorodiphenyldichloroethene, endosulfan I, and endrin, and the PCB mixture Aroclor 1254, were reported in the soil samples. Chromium and lead concentrations were reported above established Naval Station San Diego background concentrations for soil of 43.33 mg/kg and 94.03 mg/kg, respectively (BNI 1996a, 1998a).

According to the 1992 SI Report, low concentrations of 1,1,1-trichloroethane, acetone, and carbon tetrachloride were reported in groundwater samples collected from wells MW02 and MW03 on the west side of the site. No other organic compounds were reported in the groundwater samples. Several metals were reported at concentrations above the contract-required detection limit in groundwater samples from all three of the monitoring wells at IRP Site 7.

Table 5-6 summarizes groundwater results from investigations (SI and RSE) conducted before the RI and the post-RI supplemental groundwater sampling. Compounds shown in boldface in Table 5-6 were reported above Naval Station San Diego background.

**Table 5-4**  
**Soil Analytical Results, 1987 Geotechnical Investigation**  
**IRP Site 7**

<b>Boring</b>	<b>Depth (feet bgs)</b>	<b>Date Sampled</b>	<b>Total Petroleum Hydrocarbons (mg/kg)</b>	<b>Coliform by MPN (colonies per gram)</b>
B-3	2	09/25/87	2,600	0.05
B-4	5	09/25/87	7,900	ND (0.02)
B-5	5	09/25/87	1,400	ND (0.02)
B-7	3	09/25/87	5,400	ND (0.02)
B-9	2	09/25/87	32	ND (0.02)
B-10	5	09/25/87	20	ND (0.02)

Source: Dames & Moore 1987

Acronyms/Abbreviations:

bgs – below ground surface

IRP – Installation Restoration Program

mg/kg – milligrams per kilogram

MPN – most probable number (technique)

ND – not detected

IT identified MW01 as a background well for IRP Site 7 because it was in a position that was not expected to be impacted by past site activities. However, this well was the only well to contain concentrations of metals above Naval Station San Diego background.

#### **5.3.2.4 SOIL SAMPLING AND LABORATORY TESTING**

WCC performed limited soil sampling and analytical laboratory testing in March 1994 (WCC 1994) before the parking lot at IRP Site 7 was regraded. Five hand-augered or grab soil samples were collected (Figure 5-2). The samples were analyzed for SVOCs and Title 22 metals (Table 5-7). Six SVOCs were reported in one soil sample collected from the east end of the site, but none of the concentrations reported in this sample exceeded residential PRGs. Metals were reported in all of the soil samples collected during this sampling event, but arsenic, at concentrations from 1.1 to 4.7 mg/kg, was the only metal that exceeded the residential PRG of 0.39 mg/kg. All of the reported arsenic concentrations were below the background concentration of 9.05 mg/kg developed for arsenic at Naval Station San Diego.

#### **5.3.2.5 REMOVAL SITE EVALUATION**

BNI conducted an RSE at IRP Site 7 between May 1997 and March 1998 (BNI 1998c). The purpose of the RSE was to gather additional information and combine it with data from the previous investigations to:

- assess the potential for human and environmental exposure to the hazardous substances and
- support a decision regarding the need for a removal action at IRP Site 7.

## Section 5 Site Characteristics

**Table 5-5**  
**Analytes Reported in Soil Above Laboratory Method-Detection Limits**  
**1992 Site Inspection, IRP Site 7**

Analyte (2000 Residential PRG) [Background Concentration Select Metals]	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (%)	Maximum	Minimum
<b>Volatile Organic Compounds (µg/kg)</b>					
2-butanone (7,300,000)	30	7	23	83	12
4-methyl-2-pentanone (790,000)	30	1	3	5	5
acetone (1,600,000)	30	3	10	340 J	36
carbon disulfide (360,000)	30	6	20	31	2 J
ethylbenzene (230,000)	30	2	7	48	6 J
toluene (520,000)	30	4	13	12	2 J
trichloroethene (2,800)	30	2	7	4 J	1 J
xylene (total) (210,000)	30	7	23	72	5 J
<b>Semivolatile Organic Compounds (µg/kg)</b>					
1,2,4-trichlorobenzene (650,000)	30	2	7	160 J	140 J
1,2-dichlorobenzene (370,000)	30	1	3	180 J	180 J
1,4-dichlorobenzene (3,400)	30	7	23	510 J	57 J
2-methylnaphthalene (NL)	30	9	30	1,900 J	46 J
3,3-dichlorobenzidine (1,100)	30	1	3	81 J	81 J
4-chloroaniline (240,000)	30	11	37	2,600	100 J
4-methylphenol (310,000)	30	1	3	610 J	610 J
acenaphthene (3,700,000)	30	6	20	130 J	48 J
anthracene (22,000,000)	30	4	13	260 J	62 J
benz(a)anthracene (620)	30	5	17	490	98 J
benzo(a)pyrene (62)*	30	4	13	310 J*	60 J
benzo(b)fluoranthene (620)	30	5	17	390	96 J
benzo(k)fluoranthene (6,200)	30	3	10	340 J	140 J
benzo(g,h,i)perylene (NL)	30	1	3	110 J	110 J
bis(2-ethylhexyl)phthalate (35,000)	30	18	60	16,000	46 J
chrysene (6,100)	30	8	27	580 J	74 J
di-n-butyl phthalate (6,100,000)	30	1	3	150 J	150 J
di-n-octyl phthalate (1,200,000)	30	4	13	340 J	160 J
diethyl phthalate (49,000,000)	30	2	7	500	160 J
fluoranthene (2,300,000)	30	11	37	1,300 J	47 J
fluorene (2,600,000)	30	5	17	210 J	110 J
Indeno(1,2,3-cd)pyrene (620)	30	3	10	160 J	40 J
naphthalene (56,000)	30	3	10	530 J	77 J
phenanthrene (NL)	30	9	30	1,300	150 J
pyrene (2,300,000)	30	12	40	1,200	57 J

(table continues)

Table 5-5 (continued)

Analyte (2000 Residential PRG) [Background Concentration Select Metals]	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (%)	Maximum	Minimum
<b>Metals (mg/kg)</b>					
antimony (31)	30	7	23	9.4 J	4.7 B
<b>arsenic (0.39)*</b> [9.05]	30	27	90	<b>4.8*</b>	<b>0.67 B*</b>
barium (5,400)	30	28	93	349	24.8 B
cadmium (9)	30	7	23	4.6	1.6
chromium (210) [43.33]	30	30	100	85.4	2.9
cobalt (4,700)	30	30	100	19.8	4.4 B
copper (2,900) [188.85]	30	19	63	98.3	4.4 B
lead (150) [94.03]	30	22	73	106	1.5
mercury (23)	30	11	37	1.8	0.22
molybdenum (390)	30	5	17	2.8 B	1.9 B
nickel (150)	30	27	90	24.8	2.0 B
selenium (390)	30	1	3	0.52 B	0.52 B
silver (390)	30	12	40	16.5	0.7 B
vanadium (550)	30	30	100	85	21.2
zinc (23,000)	30	15	50	253	15.8
<b>Other</b>					
total cyanide (11)	30	2	7	1	1
<b>Organochlorine Pesticides/PCBs (µg/kg)</b>					
4,4'-DDE (1,700)	30	9	30	290 E	26
endosulfan I (370,000)	30	1	3	24 J	24 J
endrin (18,000)	30	1	3	40	40
<b>Aroclor 1254 (220)*</b>	30	11	37	<b>2,300*</b>	<b>260*</b>

Source: IT 1992

Note:

\* compounds and concentrations shown in boldface exceed U.S. EPA residential PRGs for 2000

Acronyms/Abbreviations:

DDE – dichlorodiphenyldichloroethene

IRP – Installation Restoration Program

µg/kg – micrograms per kilogram

mg/kg – milligrams per kilogram

NL – not listed

PCB – polychlorinated biphenyl

PRG – preliminary remediation goal

SQL – sample quantitation limit

U.S. EPA – United States Environmental Protection Agency

Review Qualifiers:

B – value less than the instrument detection limit but greater than the contract-required detection limit

E – value estimated due to interference

J – estimated concentration

**Table 5-6**  
**Groundwater Sampling Summary, IRP Site 7**

Naval Station Background <sup>a</sup>		PREVIOUS GROUNDWATER SAMPLING (SI and RSE)					SUPPLEMENTAL GROUNDWATER SAMPLING (May, June, and August 2003)				
Analyte (µg/L)		No. of Analyses (not including duplicates)	No. of Analyses Above SQL	Detection Frequency (%)	Detected Max (µg/L)	Detected Min (µg/L)	No. of Analyses (including duplicates)	No. of Analyses Above SQL	Detection Frequency (%)	Detected Max (µg/L)	Detected Min (µg/L)
Volatile Organic Compounds											
acetone	NA	7	1	14	22	22	18	0	0	— <sup>b</sup>	—
carbon tetrachloride	NA	7	2	29	9	6 J	18	0	0	—	—
chloroform	NA	7	1	14	11	11	18	6	33	13	1.5
1,1,1-trichloroethane	NA	7	1	14	3 J	3 J	18	0	0	—	—
Dissolved Metals											
aluminum	NC	4	4	100	1,880	492 J	18	1	6	24 J	24 J
antimony	65.61	7	3	43	64	42.2 J1	18	0	0	—	—
arsenic <sup>c</sup>	18.92	7	2	29	19.4 <sup>c</sup>	2.7 J1	18	8	44	11	4.9 J
barium	NC	7	7	100	111	11.9 J1	18	18	100	120	7.5 J
beryllium <sup>e</sup>	1.23	7	2	29	1.6 J1 <sup>c</sup>	1.3 J1 <sup>c</sup>	18	0	0	—	—
chromium <sup>e</sup>	14.9	7	1	14	6 J1	6 J1	18	17	94	21 J <sup>e</sup>	1.9 J
iron	NC	4	4	100	1,500 J	569 J	18	1	6	34 J	34 J
lead	6.14	3	1	14	1 J1	1 J1	18	1	6	1.8 J	1.8 J
manganese	NC	4	4	100	244	67.2	18	18	100	600	3.6 J
mercury <sup>c</sup>	0.17	7	2	29	0.27 J <sup>c</sup>	0.25 <sup>c</sup>	12	2	17	0.5 J <sup>c</sup>	0.4 J <sup>e</sup>
molybdenum	125.3	3	2	67	22.8 J1	13.2 J1	18	10	56	28	15 J
nickel	NC	7	1	14	13.3 J1	13.3 J1	18	10	56	16 J	1.5 J
selenium	NC	7	2	29	14 J1	1 J1	18	6	33	16	3.6 J
silver	8.97	3	3	100	8.3 J1	3 J1	18	1	6	6.2 J	6.2 J
vanadium <sup>c</sup>	100	7	7	100	113 <sup>c</sup>	12	18	18	100	89	6.6 J
zinc	NC	7	3	43	73.6	29.9	18	4	22	9.5 J	3.3 J

(table continues)

Table 5-6 (continued)

Notes:

- <sup>a</sup> the background concentrations are presented for informational purposes only; the values were not used to eliminate compounds from risk assessment
- <sup>b</sup> dash indicates that the compound was not reported in the groundwater sample
- <sup>c</sup> compounds and concentrations shown in boldface exceed reference background concentrations developed for Naval Station San Diego

Acronyms/Abbreviations:

IRP – Installation Restoration Program

µg/L – micrograms per liter

Max – maximum

Min – minimum

NA – not applicable

NC – not calculated

RSE – removal site evaluation

SI – site inspection

SQL – sample quantitation limit

Review Qualifiers:

J – estimated value

J1 – greater than the instrument detection limit but less than the contract-required detection limit



## Section 5 Site Characteristics

**Table 5-7**  
**Summary of Analytes Reported in Soil Above Laboratory Method-Detection Limits**  
**1994 Limited Soil Sampling, IRP Site 7**

Analyte (2000 Residential PRG)	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (percent)	Maximum	Minimum
<b>Semivolatile Organic Compounds (µg/kg)</b>					
benz(a)anthracene (620)	5	1	20	180	180
benzo(b)fluoranthene (620)	5	1	20	400	400
chrysene (6,100)	5	1	20	640	640
fluoranthene (2,300,000)	5	1	20	780	780
phenanthrene (NL)	5	1	20	200	200
pyrene (2,300,000)	5	1	20	610	610
<b>Title 22 Metals (mg/kg)</b>					
arsenic (0.39)*	5	5	100	4.7*	1.1*
barium (5,400)	5	5	100	143	28.9
cadmium (9)	5	1	20	3.4	3.4
chromium (210)	5	5	100	57.2	9.9
cobalt (4,700)	5	5	100	7.6	4.0
copper (2,900)	5	5	100	73.0	6.4
lead (150)	5	5	100	86.8	2.1
mercury (23)	5	1	20	0.85	0.85
molybdenum (390)	5	1	20	1.4	1.4
nickel (150)	5	5	100	24.6	3.3
silver (390)	5	1	20	10.2	10.2
vanadium (550)	5	5	100	62.3	23.1
zinc (23,000)	5	5	100	229	18.7

Source: WCC 1994

Note:

\* the concentration for this compound exceeds the U.S. EPA 2000 residential PRGs

## Acronyms/Abbreviations:

IRP – Installation Restoration Program

µg/kg – micrograms per kilogram

mg/kg – milligrams per kilogram

NL – not listed

PRG – preliminary remediation goal

SQL – sample quantitation limit

U.S. EPA – United States Environmental Protection Agency

The RSE consisted of installing four groundwater monitoring wells, collecting soil and groundwater samples, evaluating data from the RSE and previous investigations, and conducting a streamlined human-health and screening-level ERA.

## **Soil**

During the RSE, two rounds of soil sampling were performed, one in June 1997 and the other in March 1998. Soil samples from the initial investigation were collected from 23 borings at three depth intervals for a total of 69 soil samples (76, including field duplicates). These samples were analyzed for VOCs, SVOCs, organochlorine pesticides/PCBs, metals (including hexavalent chromium), and petroleum hydrocarbons. Soil samples from the additional investigation were collected from three borings at two depth intervals and were analyzed for metals and PCBs.

Analytical results above method-detection limits for soil samples collected during the RSE are presented in Table 5-8. Seven split soil samples were collected. The results from the split samples are not included in tables or on figures in this section; however, they were validated and used, where appropriate, in the risk assessment.

One of the sampling locations, MW04, contained 2 compounds at concentrations significantly different from concentrations reported in the other 68 samples. Arsenic, above the background concentration of 9.05 mg/kg, was reported at a concentration of 38.4 mg/kg in one sample collected from MW04 at 2 feet bgs. Aroclor 1260 was also reported in this same sample at a concentration of 900 micrograms per kilogram ( $\mu\text{g/kg}$ ), which exceeded the 1996 PRG of 66  $\mu\text{g/kg}$ . Additional soil samples were collected in March 1998 to further evaluate the arsenic and Aroclor 1260 concentrations in the immediate vicinity of MW04. Three boreholes were placed in a triangular pattern within 4 to 9 feet of MW04. Analytical results above method-detection limits for soil samples collected during the additional sampling are presented in Table 5-9.

Several VOCs were reported above detection limits in soil samples obtained from 21 of the 23 borings (Figure 5-3). Acetone occurred most frequently, followed by methylene chloride and 2-butanone. The VOCs are distributed widely throughout the site with concentrations generally decreasing with depth. None of the VOC concentrations reported in soil samples exceeded the residential 2000 PRGs.

TRPH was reported above the detection limit in 18 of 23 borings advanced during the RSE (Figure 5-3). TRPH was distributed throughout the site with higher concentrations generally occurring at shallower depths.

Numerous SVOCs were reported above detection limits in soil samples obtained from 21 of the 23 borings. Phthalates, PAHs, and phenol were the most frequently reported SVOCs (Table 5-8). The SVOCs were distributed widely throughout the site with higher concentrations generally occurring at shallower depths. Many SVOCs were reported above the detection limits; however, of these, only benzo(a)pyrene is a significant contributor to site risk. Benzo(a)pyrene was reported in samples from 12 of the borings,

## Section 5 Site Characteristics

**Table 5-8**  
**Summary of Analytes Reported in Soil Above Laboratory**  
**Method-Detection Limits<sup>a</sup> During the Removal Site Evaluation, IRP Site 7**

Analyte (2000 Residential PRG) [Background Concentration Select Metals]	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (%)	Maximum	Minimum
<b>Volatile Organic Compounds (µg/kg)</b>					
acetone (1,600,000)	69	57	88	1,100	6 J
2-butanone (7,300,000)	69	9	13	240	7 J
carbon disulfide (360,000)	69	3	4	4 J	2 J
ethylbenzene (230,000)	69	3	4	10 J	4 J
4-methyl-2-pentanone (790,000)	69	1	1	27 J	27 J
methylene chloride (8,900)	69	33	48	36	2 J
tetrachloroethene (5,700)	69	2	3	8 J	4 J
toluene (520,000)	69	3	4	11 J	6 J
trichloroethene (2,800)	69	1	1	2 J	2 J
xylene (total) (210,000)	69	5	7	69	13 J
<b>Semivolatile Organic Compounds (µg/kg)</b>					
acenaphthene (3,700,000)	69	3	4	160 J	99 J
anthracene (22,000,000)	69	10	15	200 J	27 J
<b>benz(a)anthracene (620)<sup>b</sup></b>	69	15	22	<b>710<sup>b</sup></b>	12 J
<b>benzo(a)pyrene (62)<sup>b</sup></b>	69	11	16	<b>620 J<sup>b</sup></b>	28 J
<b>benzo(b)fluoranthene (620)<sup>b</sup></b>	69	19	28	<b>820 J<sup>b</sup></b>	98 J
benzo(g,h,i)perylene (NL)	69	1	1	250 J	250 J
benzo(k)fluoranthene (6,200)	69	19	28	570 J	5 J
bis(2-ethylhexyl)phthalate (35,000)	69	44	64	16,000 J	14 J
butylbenzyl phthalate (12,000)	69	3	4	200 J	39 J
carbazole (24,000)	69	4	6	94 J	20 J
4-chloroaniline (240,000)	69	14	20	2,300	200 J
chrysene (6,100)	69	20	29	720 J	11 J
<b>dibenz(a,h)anthracene (62)<sup>b</sup></b>	69	1	1	<b>78 J<sup>b</sup></b>	<b>78 J<sup>b</sup></b>
dibenzofuran (290,000)	69	3	4	71 J	18 J
1,4-dichlorobenzene (3,400)	69	1	1	210 J	210 J
diethyl phthalate (49,000,000)	69	1	1	17 J	17 J
di-n-butyl phthalate (6,100,000)	69	22	32	61 J	10 J
di-n-octyl phthalate (1,200,000)	69	7	10	390 J	70 J
fluoranthene (2,300,000)	69	21	30	1,500	21 J
fluorene (2,600,000)	69	6	9	200 J	41 J
indeno(1,2,3-cd)pyrene (620)	69	3	4	220 J	85 J
isophorone (510,000)	69	1	1	180 J	180 J
2-methylnaphthalene (NL)	69	9	13	1,500 J	130 J
4-methylphenol (310,000)	69	2	3	1,100 J	400 J

(table continues)

## Section 5 Site Characteristics

Table 5-8 (continued)

Analyte (2000 Residential PRG) [Background Concentration Select Metals]	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (%)	Maximum	Minimum
<b>Semivolatile Organic Compounds (µg/kg) (continued)</b>					
naphthalene (56,000)	69	8	12	520 J	44 J
n-nitrosodiphenylamine (99,000)	69	2	3	230 J	220 J
phenanthrene (NL)	69	15	22	860 J	14 J
phenol (37,000,000)	69	28	41	1,600	110 J
pyrene (2,300,000)	69	23	33	2,300 J	11 J
1,2,4-trichlorobenzene (650,000)	69	1	1	270 J	270 J
<b>Metals (mg/kg)</b>					
aluminum (76,000)	69	69	100	27,300	1,220
arsenic (0.39) <sup>b</sup> [9.05]	69	54	78	38.4 <sup>b</sup>	0.67 <sup>b</sup>
barium (5,400)	69	69	100	295	8.7
beryllium (150) [3.55]	69	17	25	0.93	0.46
cadmium (9)	69	11	16	8	0.74
chromium, hexavalent (0.2) <sup>b</sup>	69	4	6	0.65 <sup>b</sup>	0.482 <sup>b</sup>
chromium, total (210) [43.33]	69	69	100	127	2.5
cobalt (4,700)	69	54	78	24.7	2.2
copper (2,900) [188.85]	69	67	97	173 J	1.8
iron (23,000) <sup>b</sup>	69	69	100	30,100 <sup>b</sup>	2,400
lead (150) <sup>b</sup> [94.03]	69	69	100	197 <sup>b</sup>	1.8 J
manganese (1,800)	69	68	99	1,000 J	53.6
mercury (23)	69	33	48	4.1 J	0.1
nickel (150)	69	60	87	72.3 J	4.5
silver (390)	69	26	38	31.4 J	1.8
vanadium (550)	69	69	100	96	9
zinc (23,000)	69	67	97	507	10.3
<b>Organochlorine Pesticides/PCBs (µg/kg)</b>					
Aroclor 1254 (220) <sup>b</sup>	69	15	22	2,920 <sup>b</sup>	87
Aroclor 1260 (220) <sup>b</sup>	69	1	1	900 <sup>b</sup>	900 <sup>b</sup>
alpha-BHC (90)	69	1	1	0.384 J	0.384 J
beta-BHC (320)	69	1	1	90.2	90.2
delta-BHC (440)	69	1	1	0.279	0.279
alpha-chlordane (1,600) <sup>c</sup>	69	4	6	2.66 J	0.349 J
gamma-chlordane (1,600) <sup>c</sup>	69	1	1	1.39 J	1.39 J
4,4'-DDD (2,400)	69	2	3	12	4.99 J
4,4'-DDE (1,700)	69	8	12	13.3	0.586 J
4,4'-DDI (1,700)	69	6	9	15.9	1.15 J
dieldrin (30)	69	1	1	3.45 J	3.45 J
endosulfan I (370,000) <sup>d</sup>	69	1	1	3.1 J	3.1 J

(table continues)

## Section 5 Site Characteristics

Table 5-8 (continued)

Analyte (2000 Residential PRG) [Background Concentration Select Metals]	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (%)	Maximum	Minimum
<b>Organochlorine Pesticides/PCBs (µg/kg)</b> (continued)					
endosulfan ii (370,000) <sup>d</sup>	69	1	1	3.39 J	3.39 J
endosulfan sulfate (370,000) <sup>d</sup>	69	3	4	5.09	0.88
endrin (18,000)	69	2	3	8.79 J	1.67 J
heptachlor epoxide (530)	69	2	3	3.18	0.891 J
methoxychlor (310,000)	69	3	4	7.8 J	4.13 J
<b>Petroleum Hydrocarbons (mg/kg)</b>					
TRPH (NL)	69	31	45	15,000 J	31 J

## Notes:

- <sup>a</sup> only analytes with values reported above the detection limits are included in this table; all other data are presented in Appendix F of the final Remedial Investigation Report (BEI 2002a)
- <sup>b</sup> compounds and concentrations shown in boldface exceed U.S. EPA 2000 residential PRGs
- <sup>c</sup> PRG listed is for total chlordane
- <sup>d</sup> PRG listed is for total endosulfan

## Acronyms/Abbreviations:

BHC – benzene hexachloride  
 DDD – dichlorodiphenyldichloroethane  
 DDT – dichlorodiphenyltrichloroethane  
 IRP – Installation Restoration Program  
 µg/kg – micrograms per kilogram  
 mg/kg – milligrams per kilogram  
 NL – not listed  
 PCB – polychlorinated biphenyl  
 PRG – preliminary remediation goal  
 SQL – sample quantitation limit  
 TRPH – total recoverable petroleum hydrocarbons  
 U.S. EPA – United States Environmental Protection Agency

## Review Qualifier:

J – estimated concentration

**Table 5-9**  
**Summary of RSE Supplemental Soil Sampling Results**  
**Above Laboratory Method-Detection Limits<sup>a</sup>, IRP Site 7**

<b>Analyte (2000 Residential PRGs)</b>	<b>Number of Analyses</b>	<b>Number of Analyses With Concentration Exceeding SQL</b>	<b>Detection Frequency (%)</b>	<b>Maximum</b>	<b>Minimum</b>
<b>Metal (mg/kg)</b>					
arsenic (0.39) <sup>b</sup>	6	6	100	<b>7.7 J<sup>b</sup></b>	<b>2.3 J<sup>b</sup></b>
<b>Organochlorine Pesticides/PCBs (µg/kg)</b>					
Aroclor 1254 (220) <sup>b</sup>	6	5	83	<b>2,800<sup>b</sup></b>	50 J
Aroclor 1260 (220) <sup>b</sup>	6	5	83	<b>1,600<sup>b</sup></b>	30 J

**Notes:**

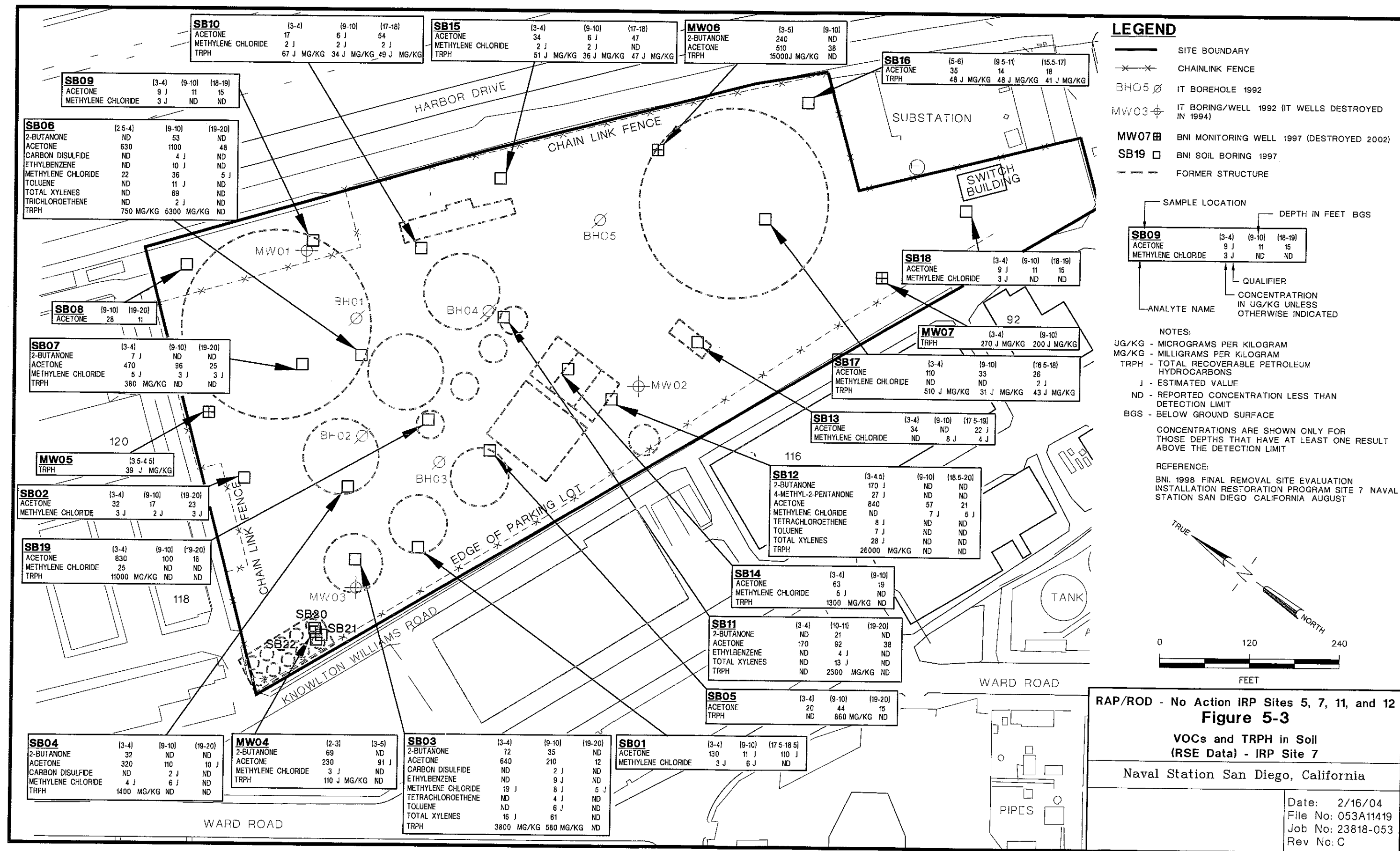
- <sup>a</sup> only those values reported above the detection limits are included in this table; all other data are presented in Appendix E of the final Remedial Investigation Report (BEI 2002a)
- <sup>b</sup> compounds and concentrations shown in boldface exceed the U.S. EPA 2000 residential PRGs

**Acronyms/Abbreviations:**

IRP – Installation Restoration Program  
 µg/kg – micrograms per kilogram  
 mg/kg – milligrams per kilogram  
 PCB – polychlorinated biphenyl  
 PRG – preliminary remediation goal  
 RSE – removal site evaluation  
 SQL – sample quantitation limit  
 U.S. EPA – United States Environmental Protection Agency

**Review Qualifier:**

J – estimated value



## Section 5 Site Characteristics

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exceeding the residential U.S. EPA 2000 PRG of 62  $\mu\text{g/kg}$  in 9 of these samples (8 RSE locations). The locations of benzo(a)pyrene PRG exceedances for all of the sampling events are shown on Figure 5-4. These concentrations are present at an average of more than 5 feet bgs, ranging from 2 to 19 feet bgs.

Several organochlorine pesticides were reported above detection limits in soil samples obtained from 13 of the 23 borings. The organochlorine pesticides were distributed widely throughout the site with concentrations reported above the detection limits generally at shallower depths. The reported concentrations of organochlorine pesticides from all investigations are shown on Figure 5-5.

During the initial investigation, Aroclor 1254 was reported above the detection limit in soil samples obtained from 11 of the 23 borings. Aroclor 1260 was reported above the detection limit in only 1 of the 23 borings; however, the reported concentration exceeded the residential PRGs. This concentration of Aroclor 1260 was reported in a soil sample obtained from MW04. To evaluate the areal extent of Aroclor 1260 near MW04, additional soil sampling was performed. The additional soil sampling results reported Aroclor 1260 above the detection limit in five of the six soil samples obtained from the three borings. In addition, Aroclor 1254 was reported above the detection limit in five of the six soil samples obtained from the three borings (Table 5-9). The PCB Aroclor 1254 appears to be widely distributed throughout the site with higher concentrations generally occurring at shallower depths. The PCB Aroclor 1260 appears to be isolated in an area in the northwest portion of the site in the vicinity of MW04.

Figure 5-5 presents the concentrations of Aroclors in the soil samples. Concentrations in excess of the residential 2000 PRG of 220  $\mu\text{g/kg}$  are indicated in blue on Figure 5-5.

Numerous metals were reported above detection limits in soil samples obtained from each of the 23 borings (Table 5-8) during the initial investigation. Because so many metals were reported above the detection limits, the results are only summarized in tabular form. The concentrations of metals reported in soil samples collected during the RSE were compared to the established Naval Station San Diego background concentrations. Total chromium was reported in all soil samples above the detection limits. Reported concentrations of total chromium exceeded the established background concentration of 43.33  $\text{mg/kg}$  in 9 of the 23 soil borings. The soil samples exceeding the background concentration for total chromium were distributed throughout the site and at various depths. Hexavalent chromium is one valence state (form) of chromium that contributes to the overall total chromium concentration. It is analyzed by a different method than is total chromium. Hexavalent chromium was reported above the detection limit in seven soil samples which, like total chromium, were distributed throughout the site and at various depths.

Lead was reported above the detection limits in all soil samples. Reported concentrations of lead exceeded the established background concentration of 94.03  $\text{mg/kg}$  in 6 of the 23 soil borings. The soil samples exceeding the background concentration for lead were distributed throughout the site and at various depths.



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**Groundwater**

Four monitoring wells, MW04 through MW07, were installed during the RSE to assess the nature and extent of contaminants in the groundwater and to determine the direction of the groundwater gradient. Free product was not reported in any of the monitoring wells.

Groundwater samples were collected from these four monitoring wells and analyzed for VOCs, SVOCs, organochlorine pesticides/PCBs, total metals (including hexavalent chromium), TRPH, and general water-quality parameters. Analytical results reported above the detection limits are summarized in Table 5-6 and on Figure 5-6. Table 5-10 lists RSE detection limits for analytes not reported above the detection limits. The groundwater results above the detection limit in previous sampling events are also included on Figure 5-6. One duplicate groundwater sample was collected during the RSE. The results from the duplicate sample are not included in a table or on a figure in this section; however, they were validated and used, where appropriate, in the risk assessment. No SVOCs, organochlorine pesticides/PCBs, hexavalent chromium, or TRPH were reported above the detection limits in the groundwater samples; therefore, these analytes are not included in the table or on the figure.

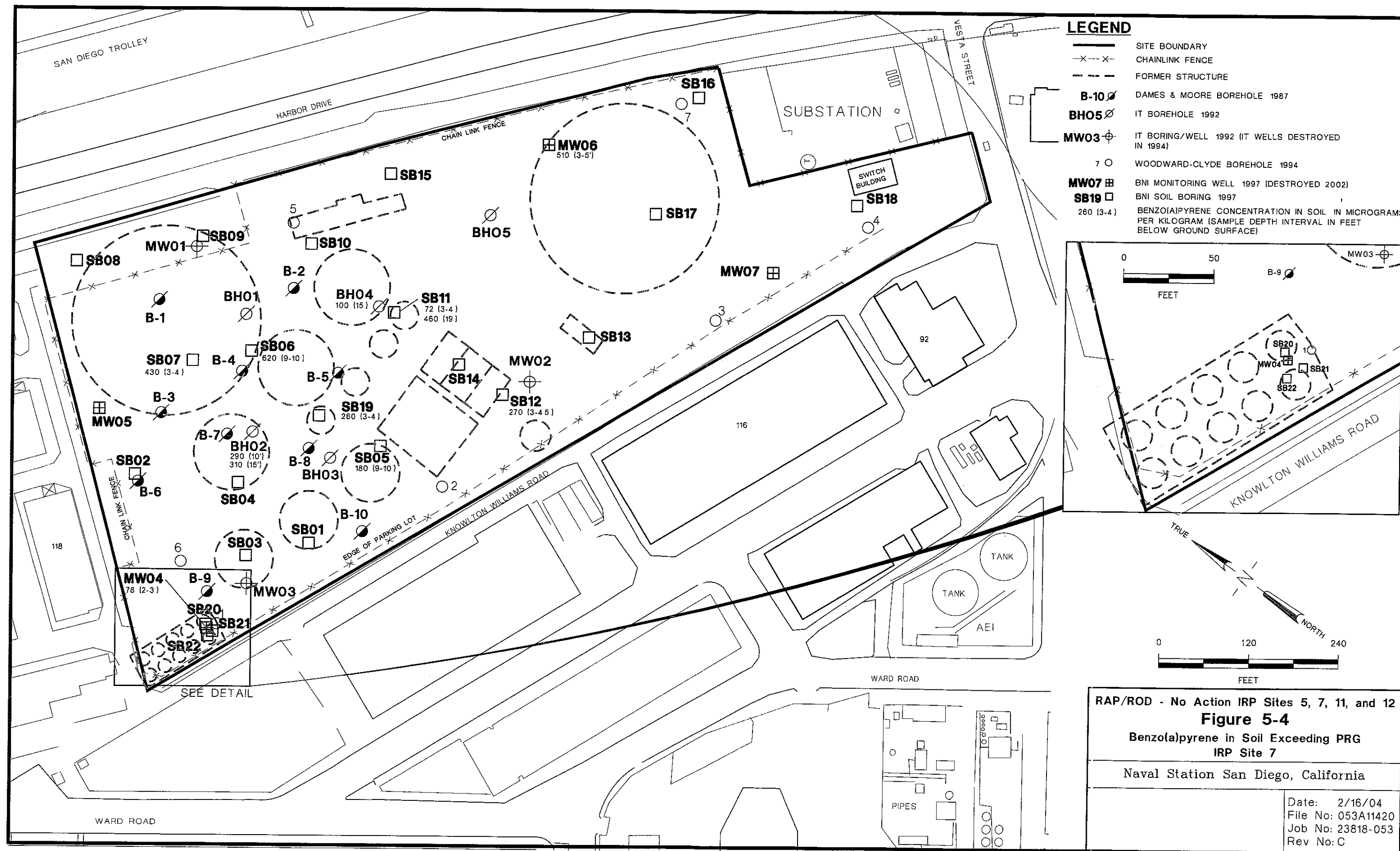
Two VOCs, carbon tetrachloride and chloroform, were reported in one groundwater sample (well MW04) at concentrations slightly above the detection limits. No other VOCs were reported in groundwater samples collected from the four monitoring wells during the RSE.

Numerous metals were reported above detection limits in all groundwater samples collected. Aluminum, barium, iron, manganese, and vanadium were reported above the detection limits in all groundwater samples collected during the RSE. In addition, antimony was reported above the detection limit in one groundwater sample (well MW04), and mercury was reported above the detection limit in two groundwater samples (wells MW05 and MW07). Only one metal, mercury, was reported at concentrations above its Naval Station San Diego reference background concentration of 0.17 µg/L.

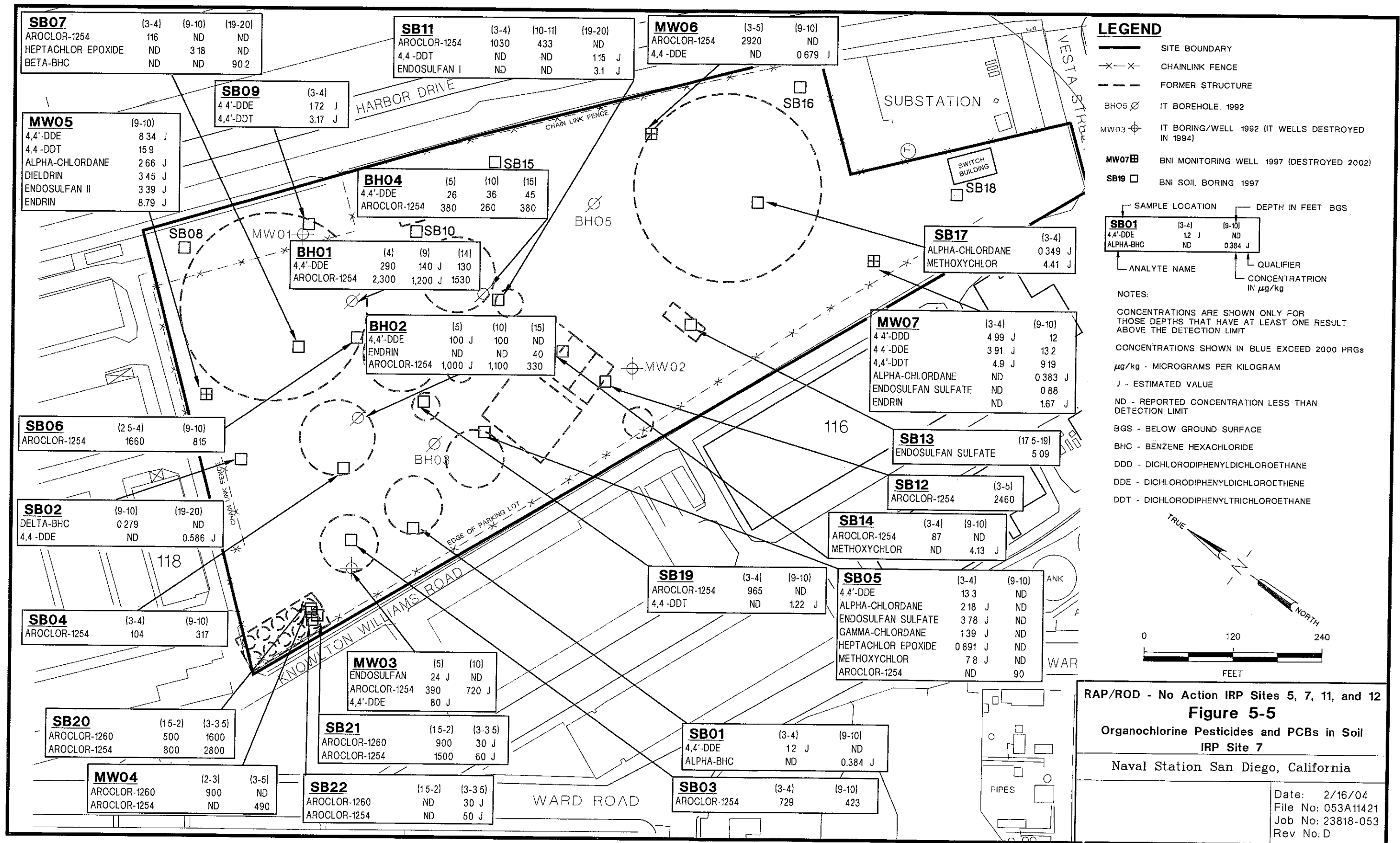
**5.3.2.6 ADDITIONAL INVESTIGATIONS**

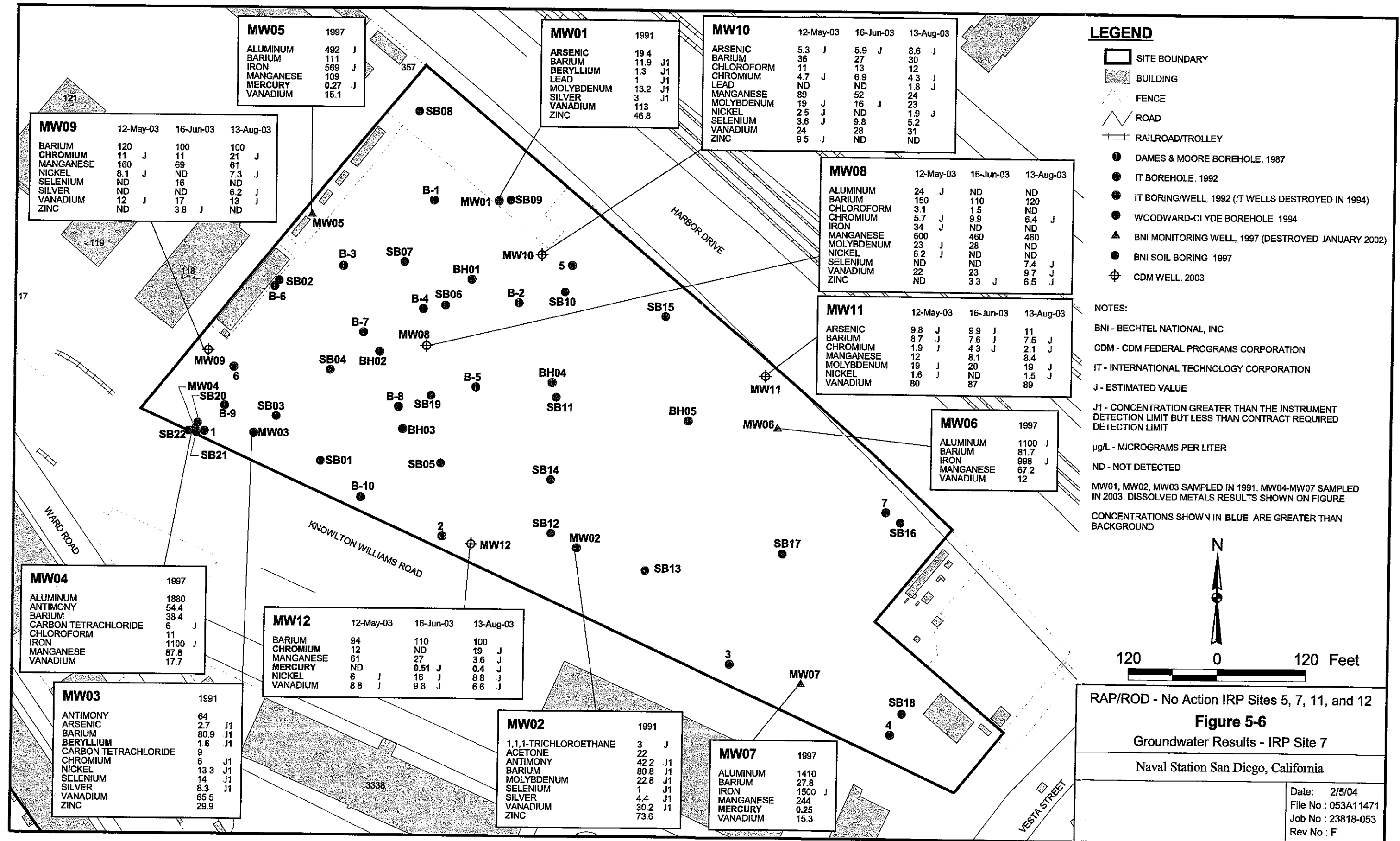
As discussed in correspondence between DTSC and the DON (DTSC 2002b, DON 2003) and at a technical advisory meeting on 27 February 2003, DTSC felt that additional groundwater investigation was needed at IRP Site 7 before it could be closed. To facilitate this additional groundwater sampling, the DON installed five new wells at IRP Site 7 in April and May 2003 (CDM 2003). Groundwater samples were collected from these wells, and the results were compared to previous analytical results to confirm previous data. The samples were analyzed for PCBs and the chemicals of potential ecological concern (COPECs) (four VOCs and dissolved and total metals) identified in the final RI Report (BEI 2002a).

A summary of the results of the supplemental groundwater sampling is presented in Table 5-6. As was the case previously, the laboratory did not report any PCBs. The



RAP/ROD - No Action IRP Sites 5, 7, 11, and 12  
**Figure 5-4**  
 Benzo(a)pyrene in Soil Exceeding PRG  
 IRP Site 7  
 Naval Station San Diego, California  
 Date: 2/16/04  
 File No: 053A11420  
 Job No: 23818-053  
 Rev No: C





## Section 5 Site Characteristics

**Table 5-10**  
**Detection Limits for RSE Groundwater Samples for Analytes**  
**Without Reported Concentrations – IRP Site 7**  
**(units reported in micrograms per liter)**

Analyte	Detection Limit
<b>Volatile Organic Compounds</b>	
benzene	10
bromodichloromethane	10
bromoform	10
bromomethane	10
2-butanone	10
carbon disulfide	10
chlorobenzene	10
chlorodibromomethane	10
chloroethane	10
chloromethane	10
dibromochloromethane	10
1,1-dichloroethane	10
1,2-dichloroethane	10
1,1-dichloroethene	10
1,2-dichloroethene (total)	10
1,2-dichloroethylene	10
1,2-dichloropropane	10
cis-1,3-dichloropropene	10
ethylbenzene	10
2-hexanone	10
4-methyl-2-pentanone	10
methylene chloride	10
styrene	10
1,1,2,2-tetrachloroethane	10
tetrachloroethene	10
toluene	10
total xylenes	10
trans-1,3-dichloropropene	10
1,1,2-trichloroethane	10
trichloroethene	10
vinyl chloride	10

(table continues)

Table 5-10 (continued)

Analyte	Detection Limit
<b>Fuel Hydrocarbons</b>	
total recoverable petroleum hydrocarbons	1,000
<b>Semivolatile Organic Compounds</b>	
acenaphthene	10
acenaphthylene	10
anthracene	10
benz(a)anthracene	10
benzo(a)pyrene	10
benzo(b)fluoranthene	10
benzo(g,h,i)perylene	10
benzo(k)fluoranthene	10
bis(2-chloro-1-methylethyl)ether	10
bis(2-chloroethoxy)methane	10
bis(2-chloroethyl)ether	10
bis(2-ethylhexyl)phthalate	10
4-bromophenyl phenyl ether	10
butylbenzyl phthalate	10
carbazole	10
4-chloro-3-methylphenol	10
4-chloroaniline	10
2-chloronaphthalene	10
2-chlorophenol	10
4-chlorophenyl phenyl ether	10
chrysene	10
1,2-dichlorobenzene	10
1,3-dichlorobenzene	10
1,4-dichlorobenzene	10
3,3'-dichlorobenzidine	10
2,4-dichlorophenol	10
di-n-butyl phthalate	10
di-n-octyl phthalate	10
dibenz(a,h)anthracene	10
dibenzofuran	10
diethyl phthalate	10
2,4-dimethylphenol	10
dimethyl phthalate	10
4,6-dinitro-2-methylphenol	25

(table continues)

## Section 5 Site Characteristics

Table 5-10 (continued)

Analyte	Detection Limit
2,4-dinitrophenol	25
2,4-dinitrotoluene	10
2,6-dinitrotoluene	10
fluoranthene	10
fluorine	10
hexachlorobenzene	10
hexachlorobutadiene	10
hexachlorocyclopentadiene	10
hexachloroethane	10
indeno(1,2,3-cd)pyrene	10
isophorone	10
2-methyl-4,6-dinitrophenol	25
2-methylnaphthalene	10
2-methylphenol	10
4-methylphenol	10
naphthalene	10
2-nitroaniline	25
3-nitroaniline	25
4-nitroaniline	25
nitrobenzene	10
2-nitrophenol	10
4-nitrophenol	25
n-nitrosodiphenylamine	10
pentachlorophenol	25
phenanthrene	10
phenol	10
pyrene	10
1,2,4-trichlorobenzene	10
2,4,5-trichlorophenol	25
2,4,6-trichlorophenol	10
<b>Pesticides and Polychlorinated Biphenyls</b>	
aldrin	0.2
Aroclor 1016	1.0
Aroclor 1221	1.0
Aroclor 1232	1.0

(table continues)

Table 5-10 (continued)

Analyte	Detection Limit
<b>Pesticides and Polychlorinated Biphenyls (continued)</b>	
Aroclor 1242	1.0
Aroclor 1248	1.0
Aroclor 1254	1.0
Aroclor 1260	1.0
alpha-BHC	0.1
beta-BHC	0.1
delta-BHC	0.1
gamma-BHC (lindane)	0.1
alpha-chlordane	0.1
gamma-chlordane	0.1
4,4'-DDD	0.2
4,4'-DDE	0.2
4,4'-DDI	0.2
dieldrin	0.2
endosulfan I	0.1
endosulfan II	0.2
endosulfan sulfate	0.2
endrin	0.2
endrin aldehyde	0.2
endrin ketone	0.2
heptachlor	0.1
heptachlor epoxide	0.1
methoxychlor	0.8
toxaphene	1.0
<b>Metals</b>	
cadmium	4
chromium, hexavalent	10
cobalt	10
copper	5
thallium	3.3

## Acronyms/Abbreviations:

BHC – benzene hexachloride

DDD – dichlorodiphenyldichloroethane

DDT – dichlorodiphenyltrichloroethane

IRP – Installation Restoration Program

µg/L – micrograms per liter

RSE – removal site evaluation



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**Section 5 Site Characteristics**

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reporting limit for PCBs for the three sampling events in 2003 was 1.0 µg/L. Only one VOC, chloroform, was reported in the groundwater samples, and the maximum reported concentration (13 µg/L) was similar to the maximum from previous sampling events (11 µg/L). Both total and dissolved metals were reported in the groundwater samples. The dissolved metals (barium, lead, manganese, molybdenum, nickel, and selenium) were reported at concentrations slightly higher than the previous maximum reported concentrations at IRP Site 7, but still below Naval Station reference background concentrations. Only two dissolved metals, chromium and mercury, were reported in the supplemental sampling at concentrations above Naval Station reference background concentrations and above concentrations reported in previous sampling. Although the dissolved metal results for these analytes were higher in the 2003 sampling, they were not significantly different from the results of previous sampling (Table 5-6) and would not significantly change the results of the ERA discussed in Section 7.

During fieldwork to install the additional five monitoring wells, DTSC collected a total of four soil samples at three well locations and the Navy collected a total of three soil samples. The combined analytical results of this sampling are presented in Table 5-11. The soil sample collected from MW-08 at 5 feet bgs was described as “pure sewage sludge” by a DTSC geologist. Although this sample was reported to contain several VOCs, PAHs, and mercury, only benzo(a)pyrene exceeded its 2000 residential PRG. The concentration of this PAH is below the maximum concentration reported in previous sampling events, and does not significantly affect the exposure point concentration (EPC) for benzo(a)pyrene used in previous risk calculations. PCBs were not reported in any of the soil samples collected by the DTSC.

Only one of the samples collected by the Navy from the borehole for MW08 at 6 feet bgs contained concentrations above the reporting limit. All of the reported concentrations in this sample were below the 2000 residential PRGs except Aroclor 1254. However, this concentration is below the maximum concentration reported in previous sampling events and, thus, does not significantly affect the EPC for Aroclor 1254 used in previous risk calculations. As outlined in the January 2003 letter (DON 2003), the risk-assessment calculations were not revised as a result of the soil results.

### **5.3.3 Nature and Extent of Contamination**

The nature and extent of soil and groundwater contamination at IRP Site 7 have been adequately defined by the four subsurface investigations conducted at the site between 1986 and 1998. Additionally, supplemental groundwater sampling was performed in 2003, which verified previous groundwater analytical results. During installation of the groundwater monitoring wells in 2003, seven soil samples were collected from boreholes for wells MW08, MW10, and MW11. Except for toluene reported in soil samples from MW-11 at 5 feet bgs and the duplicate sample from MW-10 at 5 feet bgs and mercury reported in all of the soil samples collected by the DTSC, only the samples collected from MW08 contained reported concentrations of analytes. Except for Aroclor 1254 and

**Table 5-11**  
**Summary of Analytes Reported in Soil Above Laboratory Method-Detection Limits**  
**2003 Supplemental Investigation, IRP Site 7**

Analyte (2000 Residential PRG)	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (percent)	Maximum Reported	Minimum Reported	Range of Reported Concentrations From Previous Investigations
<b>Volatile Organic Compounds (µg/kg)</b>						
1,2,4-trichlorobenzene (650,000)	4	1	25	300	300	— <sup>a</sup>
1,2,4-trimethylbenzene (52,000)	4	1	25	1,100	1,100	—
1,2-dichlorobenzene (370,000)	4	1	25	420	420	—
cis-1,2-dichloroethene (43,000)	7	1	14	2.2 J	2.2 J	—
1,3,5-trimethylbenzene (21,000)	4	1	25	480	480	—
1,4-dichlorobenzene (3,400)	4	1	25	800	800	—
2-butanone (7,300,000)	3	1	33	70 J	70 J	240-7 J
4-isopropyltoluene (NL)	4	1	25	1,300	1,300	—
4-methyl-2-pentanone (790,000)	3	1	33	11 J	11 J	27 J-5
benzene (650)	7	1	14	1.2 J	1.2 J	—
n-butylbenzene (140,000)	4	1	25	680	680	—
chlorobenzene (150,00)	7	1	14	2.0 J	2.0 J	—
ethylbenzene (230,000)	7	1	14	13 J	13 J	48-4 J
naphthalene (56,000)	4	1	25	600	600	—
sec-butylbenzene (110,000)	4	1	25	270	270	—
tetrachloroethene (5,700)	7	1	14	3.7 J	3.7 J	8 J-4 J
toluene (520,000)	7	3	43	18 J	5.5	12-2
trichloroethene (2,800)	7	1	14	4 J	4 J	4 J-1 J
xylenes (total) (210,000)	7	1	14	82 J	82 J	72-5 J
<b>Polynuclear Aromatic Hydrocarbons (µg/kg)</b>						
acenaphthene (3,700,000)	7	1	14	794	794	160 J-48 J
anthracene (22,000,000)	7	2	29	280	126	260 J-27 J
benz(a)anthracene (620)	7	1	14	599	599	710-12 J

(table continues)

Table 5-11 (continued)

Analyte (2000 Residential PRG)	Number of Analyses	Number of Analyses With Concentration Exceeding SQL	Detection Frequency (percent)	Maximum Reported	Minimum Reported	Range of Reported Concentrations From Previous Investigations
<b>Polynuclear Aromatic Hydrocarbons (µg/kg) (continued)</b>						
benzo(a)pyrene (62) <sup>b</sup>	7	1	14	178 <sup>b</sup>	178 <sup>b</sup>	620 J-28 J
benzo(b)fluoranthene (620)	7	2	29	370	259	820 J-9.8 J
benzo(k)fluoranthene (610)	7	1	14	92 J	92 J	570 J-5 J
chrysene (6,100)	7	1	14	220 J	220 J	720 J-11 J
fluoranthene (2,300,000)	7	1	14	615	615	1500-21 J
fluorene (2,600,000)	7	2	29	370 J	291	210 J-41 J
naphthalene (56,000)	7	2	29	790 J	232	530 J-44 J
phenanthrene (NL)	7	2	29	1,700	1,000	1,300 J-14 J
pyrene (2,300,000)	7	1	14	662	662	2,300 J - 11 J
<b>Polychlorinated Biphenyls (µg/kg)</b>						
Aroclor 1254 (220) <sup>b</sup>	7	1	14	2,600 <sup>b</sup>	2,600 <sup>b</sup>	2,920-50 J
<b>Metals (mg/kg)<sup>c</sup></b>						
mercury (23)	4	4	100	2.1	0.05	4.1 J-0.1

## References:

CDM 2003

SWDIV 2004

## Notes:

<sup>a</sup> dash indicates that analyte was not reported in any previous sampling<sup>b</sup> the maximum concentration for this compound reported during the 2003 supplemental sampling exceeds the U.S. EPA 2000 residential PRGs<sup>c</sup> soil samples from 2003 supplemental sampling were analyzed only for mercury

## Acronyms/Abbreviations:

IRP – Installation Restoration Program

µg/kg – micrograms per kilogram

mg/kg – milligrams per kilogram

NL – not listed

PRG – preliminary remediation goal

SQL – sample quantitation limit

U.S. EPA – United States Environmental Protection Agency

## Review Qualifier:

J – estimated value

benzo(a)pyrene, all reported concentrations were below the 2000 residential PRGs. The concentration of Aroclor 1254 was 2,600 µg/kg and the concentration of benzo(a)pyrene was 178 µg/kg, which are both lower than the maximum concentrations reported at IRP Site 7 previously. For the reasons stated in the DON's letter to DTSC (DON 2003), the results from these seven soil samples are not included in the following discussion.

### 5.3.3.1 SOIL

SVOCs, PCBs, and metals have been reported in the soil at IRP Site 7 in excess of the 2000 residential PRGs (U.S. EPA 2000a). The following section presents the soil discussion structured by depth. Consistent with risk-assessment methodologies, all soil data collected from the interval above 10 feet bgs (i.e., shallow soils as discussed here) were included in the risk assessment. Because of the asphalt and sandy gravel placed at the surface of the site, the shallowest soil sample was collected at 1.5 feet bgs. Samples were not collected in the 0- to 1.5-foot bgs interval as this interval is not relevant to evaluating contamination at the site. Information about the deeper soil (i.e., greater than 10 feet bgs) data is presented for nature and extent of contamination, with PRG comparisons provided as a point of reference.

Previous and supplemental investigations identified material consistent with sewage sludge. Where encountered, the material was typically in the upper few feet of the soil from approximately 2.5 to 4 feet bgs. In several locations, SB-06, SB-11, and SB-18, the material was present in the deeper soils but was not noted in the soils above 8 feet bgs. At MW-08, sewage sludge was reported to be present from 5 to 16 feet bgs (CDM 2003).

#### ***Shallow Soils (to a Depth of 10 Feet bgs)***

Organic compounds reported in one or more of the shallow soil samples include VOCs, petroleum hydrocarbons, SVOCs, pesticides, and PCBs. Of these compounds, only one SVOC and two PCB mixtures were reported at concentrations in excess of residential PRGs.

Various SVOCs, including PAHs and phthalates, were reported at many locations in the shallow soils at IRP Site 7. Benzo(a)pyrene was the only SVOC reported at concentrations above its residential PRG of 62 µg/kg. Benzo(a)pyrene was reported at nine locations in the upper 10 feet of soil. The highest concentration of benzo(a)pyrene was reported in a sample from 9 feet bgs. Figure 5-4 shows the locations of these samples.

PCBs at concentrations in excess of the 2000 residential PRGs occur in 15 samples at 10 locations. Aroclor 1254 was reported at concentrations above its PRG at ten locations, and Aroclor 1260 was reported only in samples collected at and around MW04. Except for soil boring SB20, concentrations of Aroclor 1254 and 1260 decrease with depth below the ground surface.

Four metals (iron, lead, hexavalent chromium, and arsenic) were reported at concentrations in surface soils greater than their 2000 residential PRGs. Lead was reported at concentrations above its PRG at two locations at 3 feet bgs. Hexavalent

## Section 5 Site Characteristics

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chromium was reported at only one location above its PRG in the shallow soils at 3 feet bgs. Arsenic was present at concentrations in excess of its Cal/EPA-modified (Cal-Modified) residential PRG at most sample locations. However, the background concentration for Naval Station San Diego for arsenic was established as 9.05 mg/kg. This background concentration was exceeded at one location, MW04, with a concentration of 38.4 mg/kg at 2 to 3 feet bgs. The concentration was nonreproducible and, therefore, nonrepresentative of the site conditions (BNI 1998c). Subsequent sampling performed in the immediate vicinity of MW04 reported arsenic concentrations below the background threshold in all of the samples. The soil containing the reported elevated concentration of arsenic was removed during well installation, and the concentration was not considered in the risk assessment.

### ***Subsurface Soils (Depths Greater Than 10 Feet bgs)***

Organic compounds reported in one or more of the deeper soil samples include VOCs, petroleum hydrocarbons, SVOCs, pesticides, and PCBs. Of these compounds, only one SVOC and two PCB mixtures were reported at concentrations in excess of residential PRGs.

As was the case with surface soils, various SVOCs were reported at many depths and locations at IRP Site 7. However, only benzo(a)pyrene was reported at concentrations above its 2000 residential PRG. Benzo(a)pyrene was reported at concentrations from 100 to 460 µg/kg in soils below 10 feet bgs at three locations.

Several organochlorine pesticides were reported in more than one soil sample in the deeper soils; however, none was reported at a concentration in excess of the 2000 residential PRG.

PCBs were not reported in any soil samples collected below 10 feet bgs during the RSE. Aroclor 1254 was reported in deeper soils during the SI conducted in 1992. The reported Aroclor 1254 concentrations exceeded the residential PRG at three locations from 14 to 15 feet bgs. Aroclor 1254 was not reported in the samples collected below 15 feet bgs.

Three metals (iron, hexavalent chromium, and arsenic) were reported in deeper soils at concentrations greater than their 2000 residential PRGs. Hexavalent chromium was reported at concentrations greater than its 2000 residential PRG of 0.2 mg/kg in samples from three locations below 15 feet bgs. Arsenic exceeded the 2000 residential PRG at most locations; however, none of the samples collected in the deeper soils contained a concentration of arsenic greater than established Naval Station San Diego background concentration.

### **5.3.3.2 GROUNDWATER**

Twelve groundwater wells have been sampled at IRP Site 7. Four of these wells were properly destroyed in January 2002, and three were destroyed in 1994.

Currently, the following five wells installed in May 2003 are present at the site:

- one well at the northwest corner of the site (MW09)

- two wells along the northeast side of the site (MW10 and MW11)
- one well in the center of the former treatment plant operations (MW08)
- one well at the midpoint along the southwest boundary (MW12)

Analytical results of groundwater sampling do not indicate a widespread groundwater impact at the site.

Low concentrations (3 to 22 µg/L) of four VOCs (acetone, carbon tetrachloride, chloroform, and 1,1,1-trichloroethane) have been reported in the five wells. Before the supplemental sampling, only carbon tetrachloride had been reported in more than one well at an estimated concentration of 6 µg/L (in former well MW04) and at 9 µg/L (in former well MW03). Both wells were close to the former drum-storage area. Supplemental sampling indicated that chloroform has been reported in three wells at concentrations from 3.1 to 13 µg/L (in former well MW04 and existing wells MW08 and MW10). The reported chloroform may be a product of the natural degradation of carbon tetrachloride.

Metals have been reported in filtered and unfiltered groundwater samples collected from the site. Only five metals (arsenic, beryllium, chromium, mercury, and vanadium) have been reported at concentrations in excess of Naval Station San Diego reference background concentrations. Of these five metals, only mercury was reported at concentrations in excess of Numeric Criteria for Priority Toxic Pollutants for the State of California (California Toxics Rule) (U.S. EPA 2000b) values for human consumption of organisms from saltwater. Nickel was the only metal reported at concentrations that exceed California Toxics Rule values for saltwater aquatic life. Generally, metals reported in groundwater above the reference background concentrations do not correspond to metals reported in soil above background concentrations and residential PRGs. The one exception is arsenic, which exceeded its residential PRG in almost all soil samples and was reported above the Naval Station San Diego background concentration at one location at 2 feet bgs. Because of the distribution of metals in the soil at IRP Site 7, it is unlikely that metals present in the groundwater are a result of past operations at the Former Sewage Treatment Plant.

### **5.3.4 Potential Migration Pathways**

IRP Site 7 is in the interior portion of Naval Station San Diego, approximately 800 feet from San Diego Bay. The site was originally included in the IRP because of concern that activities associated with wastewater treatment may have impacted the soil and groundwater at or near IRP Site 7. During operation of the treatment plant from 1951 to 1963, partially treated liquids could potentially leak from piping and tanks and migrate into the subsurface environment.

Between 1963 and 1994, the possible sources of contamination at IRP Site 7 were from demolition of the treatment plant, including residual wastewater solids, and from automobile parking. Both activities could hypothetically impact shallow soils at the site.

## Section 5 Site Characteristics

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From approximately 1978 to 1994, the site remained unpaved, facilitating stormwater infiltration through soil and into groundwater. Between 1983 and 1985, the entire site was graded and began to be used for parking. The site was paved with asphalt in 1994, and surface water runoff is currently channeled into storm drains and discharges to San Diego Bay via Outfalls 9 and 11.

Contaminants could have migrated from IRP Site 7 through several potential routes or pathways. These potential migration pathways are shown schematically on Figure 5-7 and are summarized below.

- VOCs and fugitive dust can be transported in air.
- Contaminants in soil can leach into groundwater.
- Contaminants can be transported by groundwater.
- Contaminated soil in unpaved areas can be carried off-site by surface water flow.

Only migration pathways that are currently complete are shown in yellow on Figure 5-7.

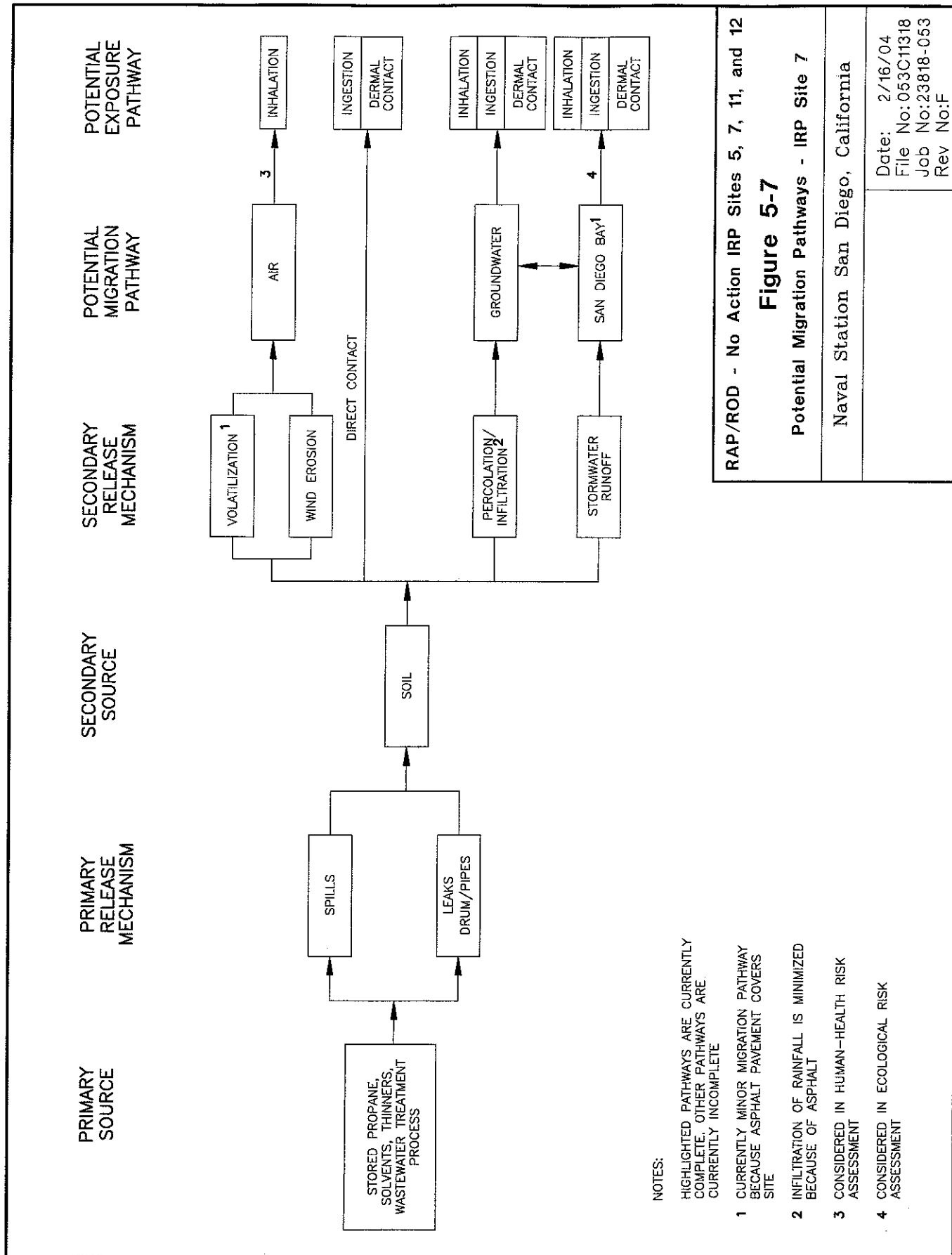
Because the ground surface at IRP Site 7 is entirely paved with asphalt, the asphalt acts as a protective cover against wind erosion and release of volatiles to the atmosphere. Observations of the site and surrounding areas indicate migration of contaminants as fugitive dust in air is currently not a significant transport pathway. However, between 1977 and 1994, the transport of surface contaminants off-site by wind was possible.

The asphalt surface currently prevents soil erosion caused by surface water runoff at IRP Site 7. Because of the relatively flat slope at the site, the low intensity of rainfall in San Diego, and the short period of time that the site was cleared of structures and remained unpaved, migration of contaminants via surface water runoff was historically a minor pathway at IRP Site 7.

Infiltration of rainwater into the subsurface material and subsequent contaminant migration to San Diego Bay via groundwater flow were historically a potential pathway.

The potential for mobilization of contaminants by this mechanism is currently minor because asphalt covers the site.

Migration of contaminants in soil to groundwater due to infiltrating rainwater moving through the soil column or due to contact between impacted soil and groundwater is currently a minor transport pathway. Net infiltration volumes are minimal because annual rainfall totals are low and evapotranspiration rates are high. However, ponding of surface runoff may have occurred during intense short-term storms, and this transport mechanism could have contributed to groundwater contamination before the entire site was paved in 1994. The chemicals of concern (COCs) present in soil at IRP Site 7 are relatively insoluble, and the potential for these chemicals to partition into groundwater and migrate off-site is minimal. In addition, because of the slow groundwater travel time, estimated at 1.1 feet per year (IT 1992), it is also unlikely that VOCs reported in the groundwater would reach San Diego Bay at their current concentrations.





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Section 5 Site Characteristics

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## 5.4 IRP SITE 11

The following subsections summarize the site history and present the results of investigations conducted at IRP Site 11.

### 5.4.1 Site History

The French drain was identified as an IRP site because it was originally suspected to be a partially buried drum. Upon investigation, it was determined that what was thought to be a partially buried drum was, in fact, a corrugated steel pipe surrounding steam condensate lines that originate from a locker room in Building 3053. The site history and results of the subsequent investigation at IRP Site 11 did not indicate that a release of hazardous waste occurred at this site.

### 5.4.2 Site Investigations

On 06 December 1993, PWC collected two soil samples from 3 inches and 5 feet bgs at IRP Site 11. The two soil samples were submitted for analysis of metals, TPH as gasoline and diesel, TRPH, BNA extractables, and VOCs. Contaminants were not reported in the soil samples (Table 5-12).

In March and April 1996, the French drain (IRP Site 11) was inspected and a limited subsurface soil and groundwater assessment was conducted by PTES. On 26 March 1996, groundwater samples were collected from four Strataprobe™ boreholes in which 1-inch polyvinyl chloride casing was set to 13 feet bgs. The groundwater depth was measured at 8 feet bgs. Four groundwater samples were submitted for analysis of TRPH, TPH, PCBs, VOCs, SVOCs, and metals (Table 5-13). On 23 April 1996, PTES excavated a 60-square-foot area around the French drain to allow for the collection of soil samples from the water table. Four soil samples were collected from 8 feet bgs and submitted for analyses of TRPH, TPH, PCBs, VOCs, SVOCs, and metals (Table 5-12). The results indicated that the soils adjacent to the French drain were not adversely impacted.

TPH as gasoline and diesel, BNA extractables, VOCs, SVOCs, and PCBs were not reported in any of the soil samples. The reported concentrations in soil samples are summarized as follows.

- **Metals** – Metals concentrations were reported by the laboratory to be below the Title 22 total threshold limit concentrations.
- **TRPH** – Concentrations of TRPH were reported in all six samples, with concentrations from 21.5 to 14,575.2 mg/kg. All six samples were also submitted for TPH as diesel and TPH as gasoline analyses. TPH as diesel and TPH as gasoline were not reported in any of the soil samples.

**Table 5-12**  
**Summary of Soil Data<sup>a,b</sup>, IRP Site 11**  
**(units reported in milligrams per kilogram)**

Chemical	Number of Analyses	Number of Detections	Range of Positive Detections
<b>Total Recoverable Petroleum Hydrocarbons</b>	6	6	21.5–14,575.2
<b>Metals</b>			
antimony	6	2	4–11
arsenic	6	1	0.62
barium	6	2	15–140
beryllium	6	2	4.55–6.9
cadmium	6	2	7.45–10.7
chromium	6	5	15–82.9
cobalt	6	3	2.05–13
copper	6	4	16–2,645
lead	6	2	69.8–109
mercury	6	2	0.052–0.29
molybdenum	6	2	8.45–13.8
nickel	6	2	13.5–27.8
selenium	6	2	7.7–11.2
thallium	6	2	6.45–7.9
vanadium	6	6	13.2–80
zinc	6	5	18–1,497

**Notes:**

<sup>a</sup> only reported concentrations are included in summary

<sup>b</sup> data taken from Navy Public Works Center Environmental Laboratory Report, dated 30 December 1993, and Pacific Treatment Analytical Services, Inc., Laboratory Analytical Report, dated 26 April 1996

**Acronym/Abbreviation:**

IRP – Installation Restoration Program

## Section 5 Site Characteristics

**Table 5-13**  
**Summary of Groundwater Data<sup>a,b</sup>, IRP Site 11**

Chemical	Number of Analyses	Number of Detections	Range of Positive Detections
<b>Semivolatile Organic Compounds (µg/L)</b>			
2,3,4,6-tetrachlorophenol	4	1	6.34
bis(2-ethylhexyl)phthalate	4	2	6.87–25.6
pentachlorophenol	4	1	8.10
<b>Total Recoverable Petroleum Hydrocarbons (mg/L)</b>	4	2	1.0–1.2
<b>Metals (mg/L)</b>			
arsenic	4	3	0.003–0.023
vanadium	4	1	0.024

**Notes:**

<sup>a</sup> only reported concentrations are included in summary

<sup>b</sup> data taken from Pacific Treatment Analytical Services, Inc., Laboratory Analytical Report, dated 01 April 1996 and 11 April 1996

**Acronyms/Abbreviations:**

IRP – Installation Restoration Program

µg/L – micrograms per liter

mg/L – milligrams per liter

TPH, VOCs, and PCBs were not reported in any of the groundwater samples. The concentrations reported in groundwater samples are presented in Table 5-13 and summarized as follows.

- **Metals** – Concentrations of arsenic and vanadium were reported in three and one, respectively, of four groundwater samples. The maximum concentration of arsenic was reported to be 0.023 milligrams per liter (mg/L), and the concentration of vanadium was reported to be 0.024 mg/L.
- **SVOCs** – Three SVOCs (2,3,4,6-tetrachlorophenol, bis(2-ethylhexyl)phthalate, and pentachlorophenol) were reported at concentrations just above the detection limits. The maximum concentration of these SVOCs was reported to be 25.6 µg/L of bis(2-ethylhexyl)phthalate.
- **TRPH** – TRPH was reported in two samples at concentrations of 1.0 to 1.2 mg/L.

## 5.5 IRP SITE 12

The following subsections discuss the geology, hydrology, site history, and previous investigations conducted at IRP Site 12.

### 5.5.1 Geology and Hydrology

Soil samples collected during the ESI field activities were visually classified as hydraulically dredged silt, sand and fine-grained silty sand, and silty clay soils. The 1859 Hydrographic Chart of San Diego Bay (Coast Survey Office 1859) indicates that the majority of what is now IRP Site 12 was submerged in 1859. Water depth averaged approximately 4 feet below mean lower low water (approximately 15 feet below current ground surface) across the site before it was filled. The northeastern portion of IRP Site 12 was emergent land in 1859 but has also received fill to bring it to its current elevation. The northern portion of IRP Site 12 was constructed of hydraulic fill in 1941 (BNI 2001). The upper portion of the site consists of fill material extending to approximately 7 to 15 feet bgs and is underlain by bay deposits consisting of silty clay/silty sand below fill to the maximum depth explored, approximately 20 feet bgs.

The depth to groundwater measured in monitoring wells MW1 through MW5 ranged from 7 to 9 feet bgs. The groundwater measurements were used to construct the groundwater-elevation contours for IRP Site 12 shown on Figure 5-8. The groundwater flow direction was estimated to be south-southwest with a gradient of 0.004 ft/ft.

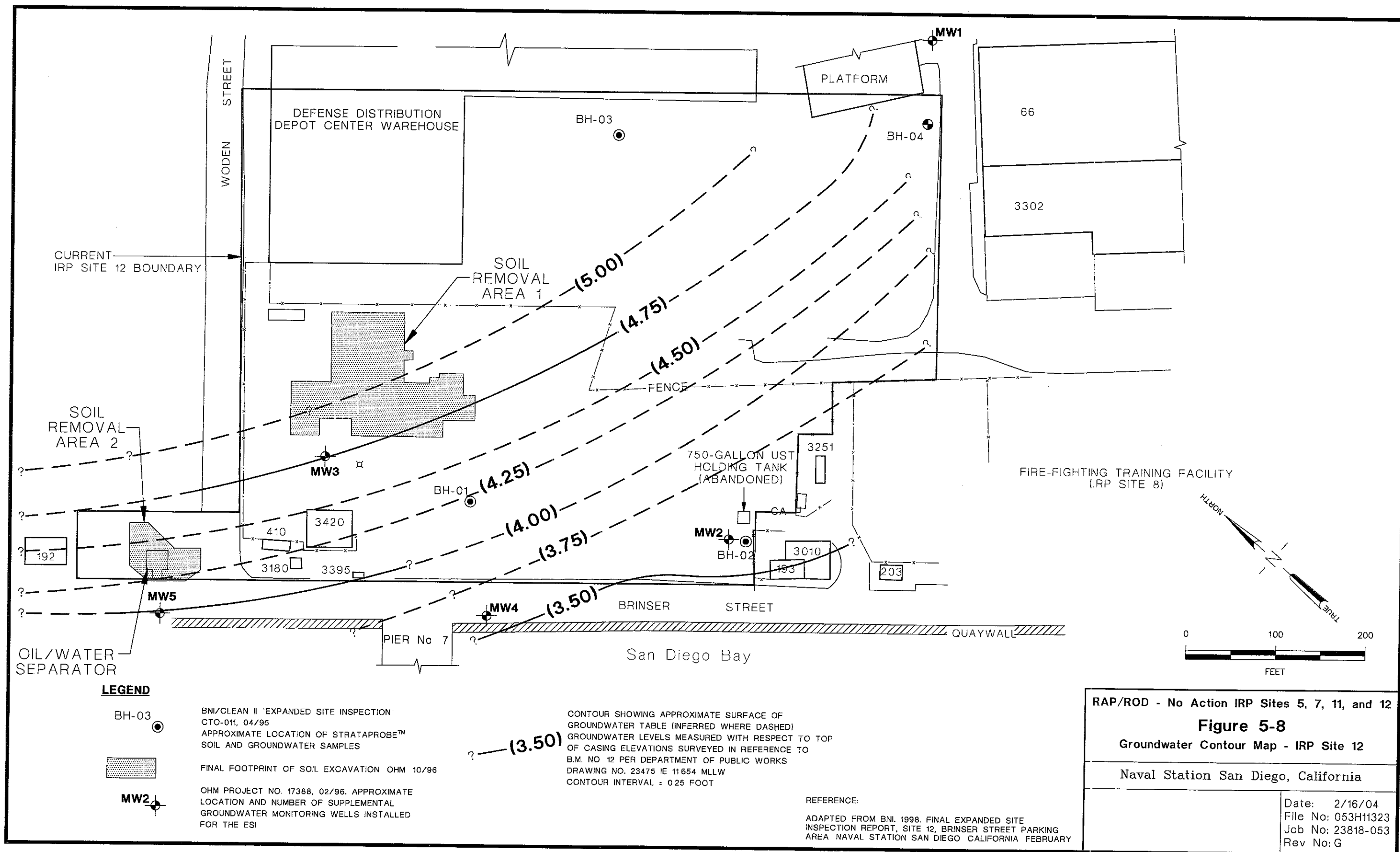
A limited tidal influence evaluation was performed in two of the monitoring wells installed by OHM Remediation Services Corp. (OHM) as part of the ESI. Groundwater fluctuations from 2.2 to 3.5 feet were observed in monitoring wells MW-03 and MW-05, respectively.

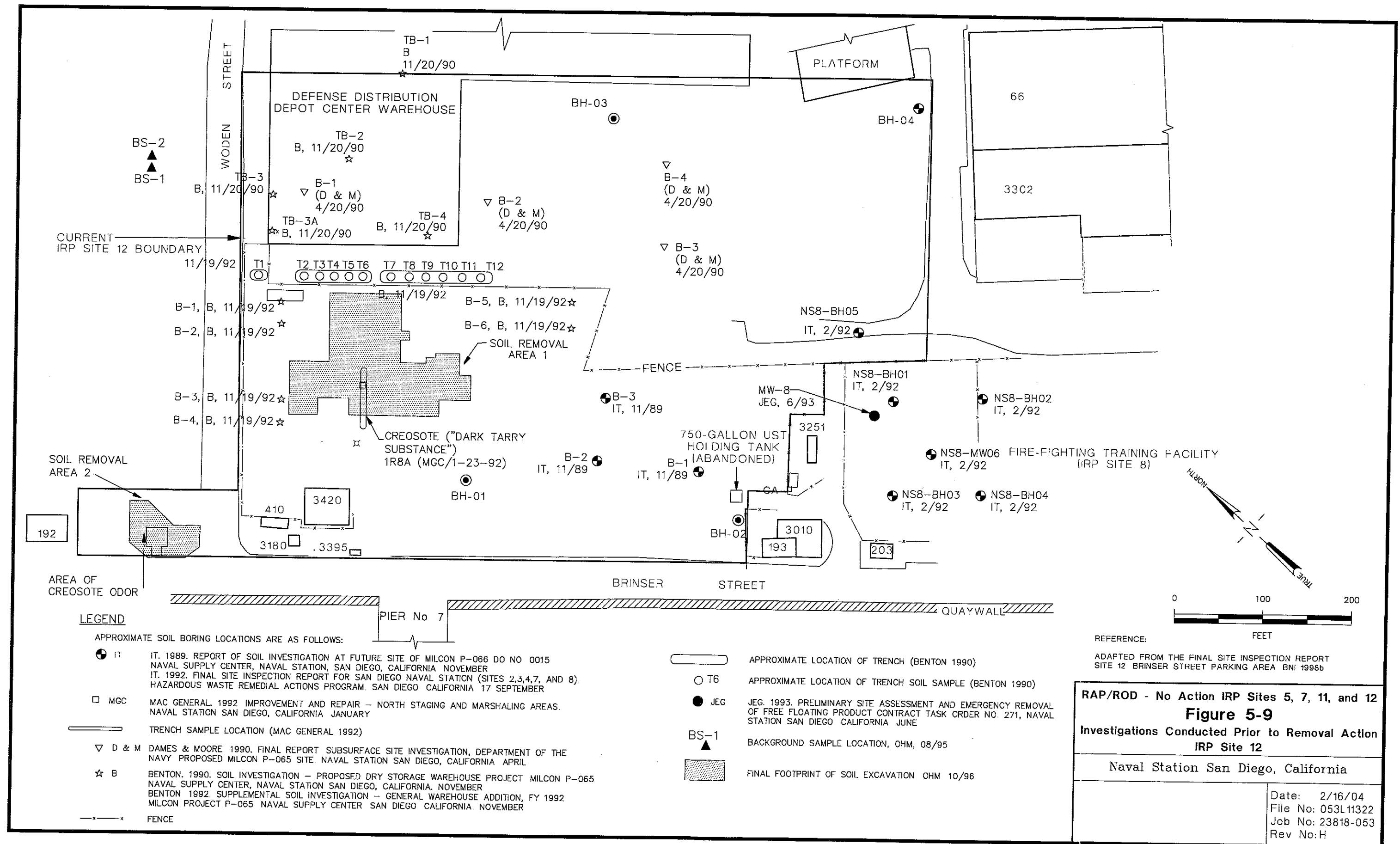
### 5.5.2 Site History

IRP Site 12 is an 11-acre site bordered by Woden Street to the northwest; the MILCON P-065 general warehouse to the east; Building 66, Building 3302, and the IRP Site 8 FFTF to the southeast; and Brinser Street to the southwest. The southwestern boundary of IRP Site 12 is adjacent to San Diego Bay, separated by a quay wall. Two historical photographs of the site taken during 1942 and 1943 indicate the presence of two creosote dip ponds for treating lumber at two locations. A comparison between the historical site plan plotted with these photographs and plot plan for prior investigations indicates that the locations of the historic creosote dip ponds correspond with the areas excavated during the removal action (Figure 5-9) (BNI 1998b, OHM 1997).

### 5.5.3 Site Investigations

Several previous soil investigations have been conducted at IRP Site 12; most have been associated with MILCON projects. In response to the discovery of elevated PAHs, a removal action for soils was performed at IRP Site 12 (OHM 1997). An ESI conducted after the removal action included a risk assessment of hazards posed by the residual chemicals of potential concern (COPCs) at IRP Site 12 (BNI 1998b). The purpose of the ESI was to collect groundwater data and additional soil data from IRP Site 12 and, together with all postremoval data obtained from previous investigations, conduct a baseline risk assessment. In support of the ESI, the remedial action contractor installed





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## Section 5 Site Characteristics

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four monitoring wells in February 1996 and collected groundwater samples. PAHs that were reported in soil excavated during the removal action were not reported in groundwater samples. The analytical results obtained from the four ESI monitoring wells were also used to assess the risk to the ecological receptors in the San Diego Bay. As a result of the baseline risk assessment, no further action was recommended for IRP Site 12.

The results of the site investigations conducted before the removal action, the removal action, and the postremoval investigation activities are discussed below. Figure 5-10 illustrates a simple conceptual model of IRP Site 12.

### 5.5.3.1 PREREMOVAL-ACTION INVESTIGATIONS

Between 1989 and 1996, several soil investigations were conducted before the removal action at IRP Site 12. Figure 5-9 shows the sample locations for these investigations. These preremoval-action investigations are summarized below.

#### ***Soil Investigation at MILCON Site (1989)***

II conducted a soil investigation at IRP Site 12 (II 1989b) that included drilling and sampling three soil borings for the proposed MILCON P-065 dry-storage warehouse at the Naval Supply Center compound (Figure 5-9). Nine soil samples were analyzed for VOCs, SVOCs, metals, organochlorine pesticides/PCBs, TPH, BTEX, total phenols, and total cyanides.

Arsenic and beryllium were reported at concentrations greater than U.S. EPA Region 9 residential PRGs, and arsenic was also reported above its industrial PRG. No other analyte was reported at a concentration greater than U.S. EPA Region 9 or Cal-Modified residential or industrial PRGs. TPH was not reported above the detection limit in any of the samples.

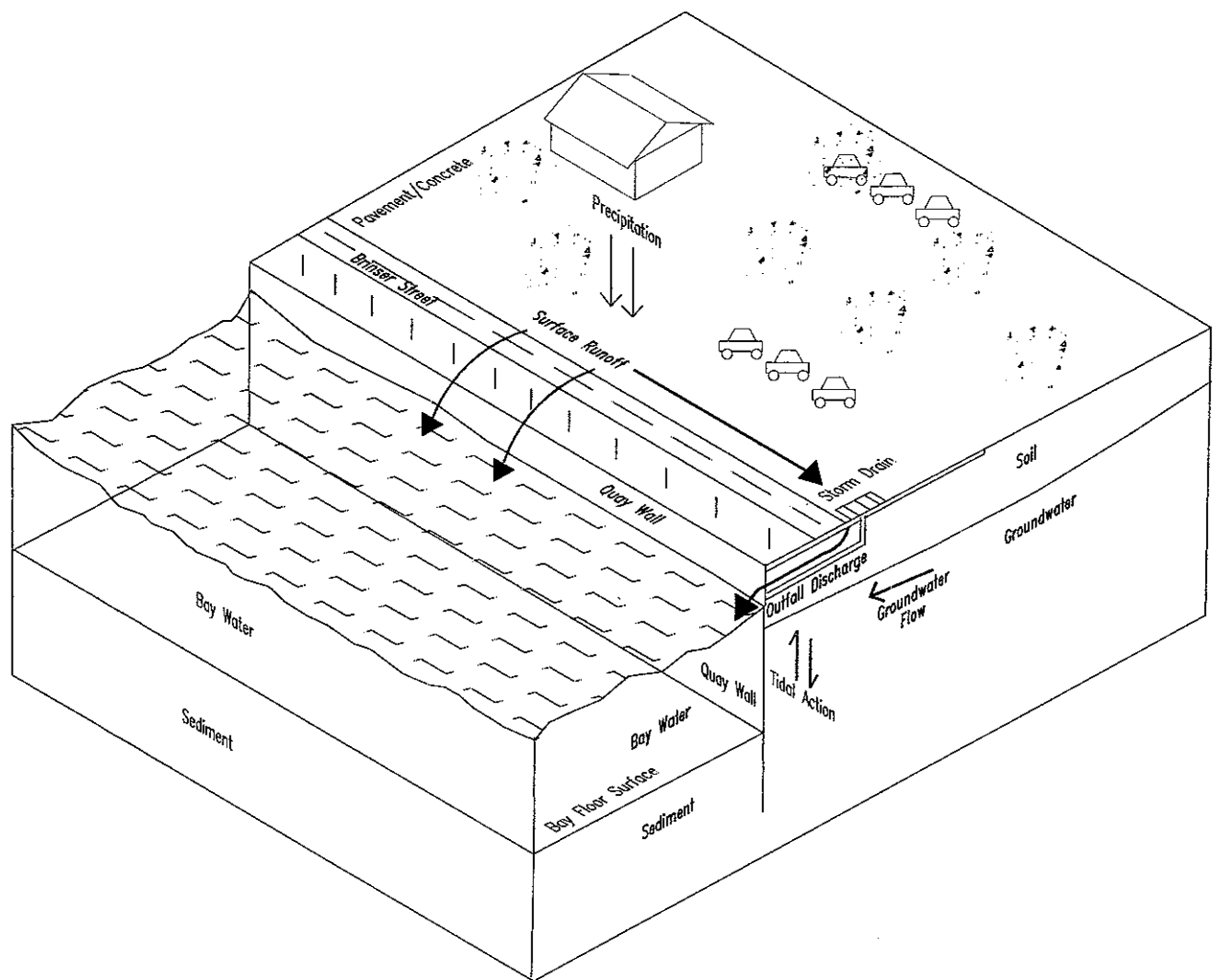
#### ***Site Investigation at MILCON Site (1990)***

Dames & Moore conducted a site investigation at IRP Site 12 (Dames & Moore 1990) for the proposed MILCON P-065 dry-storage warehouse project. Four soil borings were drilled, and 12 soil samples were collected and analyzed for VOCs, SVOCs, metals, organochlorine pesticides/PCBs, TPH, total phenols, and total cyanides.

Arsenic and beryllium were reported at concentrations greater than residential PRGs, and arsenic was also reported above its industrial PRG. No other analyte was reported at a concentration greater than residential or industrial PRGs. TPH was not reported above the detection limit in any of the samples.

#### ***Soil Investigation at Proposed Dry-Storage Warehouse***

Benton Engineering, Inc. (Benton), conducted a soil investigation at IRP Site 12 (Benton 1990) that included drilling and soil sampling at six soil boring locations at a proposed dry-storage warehouse. The purpose was to gather data to assess the subsurface soil conditions and physical characteristics of the soil for construction of building



RAP/ROD - No Action IRP Sites 5, 7, 11, and 12

### Figure 5-10

Conceptual Model - IRP Site 12

Naval Station San Diego, California

Date: 2/2/04  
File No: 053X11319  
Job No: 23818-053  
Rev No: B



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**Section 5 Site Characteristics**

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foundations for the proposed dry-storage warehouse additions. Eighteen soil samples were analyzed for VOCs, SVOCs, metals, organochlorine pesticides/PCBs, TPH, BTEX, and total cyanides.

Antimony and arsenic were reported at concentrations greater than residential PRGs, and arsenic was also reported above its industrial PRG. No other analyte was reported at a concentration greater than residential or industrial PRGs. TPH was not reported above the detection limit in any of the samples.

***Site Investigation Improvement and Repair – Marshaling Areas***

Mac General Corporation conducted a site investigation at IRP Site 12 (Mac General 1992) during the improvement and repair of marshaling areas. A “dark, tarry substance” was encountered at approximately 2 feet bgs during trenching for installation of overhead-light electric lines near the north-central portion of the site. The backhoe operator and the construction foreman noted a strong odor emanating from the trench. Both later developed rashes on their hands, arms, and faces. The odor was also encountered in a trench dug in the northwest portion of the site (the motorcycle parking area); however, the dark tarry substance was not encountered.

Two soil samples were collected, one from a soil boring and one from the trench. The sample from the boring was analyzed for VOCs, SVOCs, pesticides and PCBs, TPH, total phenols, and oil and grease. The sample from the trench was analyzed for SVOCs, pesticides and PCBs, and total phenols.

Twelve SVOCs were reported at concentrations greater than residential PRGs. These included acenaphthene, anthracene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluorene, indeno(1,2,3-cd)pyrene, and naphthalene. No other analyte was reported at a concentration greater than residential or industrial PRGs. Oil and grease were reported at an elevated concentration (52,867 mg/kg) in the soil boring sample. TPH was not reported above the detection limit in any sample.

***Supplemental Soil Investigation – Warehouse Addition***

Benton conducted a soil investigation at IRP Site 12 (Benton 1992) to supplement the earlier investigation at the warehouse. The investigation included drilling and sampling six soil borings and sampling soil from an approximately 1.5-foot-wide by 3-foot-deep by 260-foot-long trench. Twenty-four soil samples were collected, including 12 samples from the trench and 2 samples from each of the 6 soil borings. Benton analyzed the soil samples for VOCs, SVOCs, metals, (including hexavalent chromium), organochlorine pesticides/PCBs, TRPH, and total cyanides.

Antimony, arsenic, and hexavalent chromium were reported to be at or greater than residential PRGs; arsenic was also reported above its industrial PRG. No other analyte was reported at a concentration greater than residential or industrial PRGs. TRPH was reported in four soil samples at concentrations from 400 to 1,290 mg/kg.

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**Site Inspection for Naval Station San Diego**

IT performed an SI at Naval Station San Diego in 1992. As a part of the SI, IT performed a soil investigation at the IRP Site 8 FFTF located adjacent to IRP Site 12. One soil boring advanced as part of the IRP Site 8 soil investigation was within the IRP Site 12 boundaries.

The results from this soil boring, NS8-BH05, are included in the IRP Site 12 data set. The two soil samples collected from NS8-BH05 were analyzed for VOCs, SVOCs, metals, organochlorine pesticides/PCBs, TPH, and total cyanides. No analyte was reported at a concentration greater than residential or industrial PRGs. TPH was not reported above the detection limit in any sample.

**Removal Site Evaluation**

OHM performed an RSE in 1995 (OHM 1996). OHM collected six soil samples initially and analyzed them for VOCs, SVOCs, metals, and petroleum hydrocarbons. Five PAHs were reported at concentrations greater than residential PRGs.

During the RSE, soil in the upper 5 feet of Areas 1 and 2 was sampled at previously surveyed grid points, at three depth intervals. Sixty-three boring locations were sampled at three depth intervals. The soil samples were field screened for PAHs, and 30 confirmation samples (20 percent of total) were sent to an off-site laboratory for analyses.

Arsenic, manganese, and five PAHs were reported at concentrations greater than residential PRGs. On the basis of the RSE findings, a removal action was recommended.

**5.5.3.2 REMOVAL ACTION**

A TCRAM/Removal Action Work Plan was prepared to document the DON's decision to perform a removal action at IRP Site 12 (BNI 1996b). Soil risk was established at IRP Site 12 before the removal action as a part of the TCRAM. Concentrations of 11 SVOCs exceeded their respective residential PRGs. Although concentrations of some metals (e.g., arsenic, antimony, and beryllium) exceeded residential PRGs, the concentrations were consistent with those found in the hydraulic fill that underlies much of Naval Station San Diego. Therefore, these metals were not included in the risk analysis. Total soil risk associated with Areas 1 and 2 at IRP Site 12 before conducting the removal action was calculated to be  $3.2 \times 10^{-3}$ , which exceeds the generally acceptable range of  $1 \times 10^{-6}$  to  $1 \times 10^{-4}$  listed in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

A removal action was performed at IRP Site 12 by OHM between 03 June and 31 July 1996. The activities and results of the removal action were documented in the final Project Closure Report (OHM 1997).

Approximately 2,828 cubic yards (5,090 tons) of PAH-impacted soil was excavated at an average of 4 feet bgs to a maximum of 9.5 feet bgs. This soil was transported off-site. The horizontal limits of excavation (i.e., Areas 1 and 2) are shown on Figure 5-9. A total of 108 and 23 soil samples were collected in Areas 1 and 2, respectively, to assess the

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Section 5 Site Characteristics

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removal effectiveness. Samples were collected from the excavation floor on 20-foot centers and from excavation sidewalls at 40-foot linear intervals. Confirmation samples were collected and analyzed to assess the condition of the remaining soil. Field test kits were also used to supplement the confirmation sample results. In cases where confirmation sampling indicated PAH concentrations greater than the residential PRGs, the excavation was extended laterally or vertically, depending on the sample location. Upon receipt of confirmation sample analyses below residential PRGs, the excavations were backfilled with clean fill in 1-foot lifts. A geotextile fabric was installed at approximately 0.5 to 1 foot bgs before placement of Class II aggregate. The backfilling process included paving the surface with asphalt.

Analytical testing of the confirmation samples showed PAHs at concentrations above residential PRGs were removed. The estimated cancer risk associated with PAHs left in place in Areas 1 and 2 after the removal action was calculated at  $1.2 \times 10^{-6}$ . Because the removal action reduced the soil risk to essentially the acceptable level ( $10^{-6}$ ) described in the NCP, no further action was recommended for Areas 1 and 2 (OHM 1997).

### 5.5.3.3 POSTREMOVAL-ACTION INVESTIGATIONS

The principal investigation for soil and groundwater at IRP Site 12 was the ESI. During this investigation, data representative of site conditions after the removal action were used in the risk assessment of hazards posed by residual COCs present at the site. Groundwater data and additional soil data were collected from IRP Site 12 so that, together with all postremoval data obtained from previous investigations, a risk assessment of hazards posed by the COCs to human health and the environment could be performed.

For the ESI, three areas at IRP Site 12 were targeted, on the basis of previous investigations or historic information, as areas where data gaps existed in site characterization. These areas were as follows:

- two areas with surficial soil staining, within IRP Site 12 boundaries but outside the areas of the removal action, identified in aerial photographs examined in preparation for the ESI
- one general area of an abandoned 750-gallon concrete USI near the southwest corner of the site, where surficial soil staining was also noted during review of historic aerial photographs

A comparison of the historic site plan with the plot plan for prior investigations indicated that the historic creosote shed and the creosote trough locations shown on the historical photographs corresponded with the removal action areas at IRP Site 12. The ESI involved collecting and evaluating 15 soil samples (12 soil samples plus 3 field duplicates) from these three areas. The ESI also involved collecting two rounds of groundwater samples from five monitoring wells (10 groundwater samples plus 2 duplicate samples) located at and downgradient of the site. Four monitoring wells were constructed as part of the ESI.

The 15 soil samples were analyzed for VOCs, SVOCs, metals, TRPH, and TPH. The 12 groundwater samples were analyzed for VOCs, SVOCs, organophosphorous pesticides, chlorinated herbicides, target analyte list metals, TRPH, and TPH. Data related to the ESI and from postremoval soil and groundwater were evaluated. The results of the background study for Naval Station San Diego were used in the data evaluation.

Analytes reported above detection limits in soil and groundwater samples are summarized in Tables 5-14 and 5-15, respectively. Soil analytical results of the ESI for organics and inorganics are presented on Figures 5-12 and 5-13, respectively. An HHRA and a preliminary ecological assessment (Section 7) were performed using sitewide data collected during the ESI and data from previous investigations as applicable. On the basis of the findings of the ESI and because the site is currently a parking lot and a shipping and receiving area, no further action was recommended for IRP Site 12 at Naval Station San Diego (BNI 1998b).

**Table 5-14**  
**Analytes Reported Above Detection Limits in Soil Samples, IRP Site 12**

Analyte		BORING NO./DEPTH (feet bgs)											
		BH-01		BH-02		BH-03 <sup>a</sup>		BH-04 <sup>a</sup>					
		4.5	9.0	14.5	4.5	9.5	19.5	3.0	8.5	13.5	4.0	9.5	14.0
Volatile Organic Compounds (µg/kg)													
acetone		10 J	15	< <sup>b</sup> 13	< 13	< 12	10 J	< 11	< 12	< 14	< 11	6 J	7 J
Semivolatile Organic Compounds (µg/kg)													
bis(2-ethylhexyl)phthalate		160 J	150 J	120 J	130 J	190 J	180 J	< 370	< 410	< 440	< 340	< 420	< 450
di-n-butylphthalate		< 440	< 390	< 870	< 440	< 410	< 560	150 J	170 J	210 J	74 J	140 J	180 J
Total Petroleum Hydrocarbons													
No analytes reported above detection limits													
Total Recoverable Petroleum Hydrocarbons													
No analytes reported above detection limits													
Metals <sup>c</sup> (mg/kg)													
aluminum		7,960	7,950	22,300	15,100	19,500	32,800	6,070	4,960	12,800	3,030	10,600	8,680
arsenic		< 1.2 J	< 1.6 J	< 2.8 J	< 1.0 J	< 1.2 J	< 3.7 J	2.9	3.1	3.8	2.1	2.9	2.5
barium		88.8	81.1	231	116	182	162	24.8	22.4	84.7	14.2	23.2	53.3
beryllium		< 0.26	< 0.24	0.57	0.32	0.39	0.69	< 0.23	< 0.25	0.34	< 0.21	< 0.26	< 0.27
chromium		10.4	10.2	31.1	19.2	23.9	53.3 <sup>d</sup>	6.9	9.8	20.4	5.5	9.2	13.8
cobalt		8.1	4.8	15.5	9.3 J	11	16	4.0	4.5	10.5	2.1	4.0	5.2
copper		10.2	7.3	25.5	15.7	18.4	35.3	4.8	5.2	18.8	3.4	4.7	14.5
lead		3.5	6.0	8.7	4.9	4.7	25.6	7.8	2.1	7.7	1.4	3.5	9.3
manganese		348	95.2	453	379	549	624	143	103	168	65.7	71.4	101
mercury		< 0.11	< 0.10	< 0.11	< 0.13	< 0.11	< 0.16	< 0.09	< 0.12	< 0.13	< 0.10	< 0.12	0.3
nickel		6.4	5.0	14.1	9.2	10.8	19.4	3.5	4.5	10.5	2.5	4.7	7.6
selenium		0.70	0.91	1.1	0.84	0.89	1.8	< 0.45	< 0.49	< 0.55	< 0.42	< 0.51	< 0.54
thallium		< 0.26	< 0.24	0.54	0.30	0.27	0.64	< 0.23	< 0.25	0.29	< 0.21	< 0.26	< 0.27
vanadium		34.5	32.1	93.6	41.2	57.9	156	21.2	19.4	57.2	14.5	19.5	29.6
zinc		20.1	22	56	38.1	40.7	77.6	12.3	12	24.7	8.3	23.6	32.2

(table continues)

**Table 5-14 (continued)**

**Notes:**

- <sup>a</sup> soil and groundwater samples collected from BH-03 and BH-04 were impacted during transport to the laboratory; therefore, the locations were sampled as BH-03A and BH-04A
- <sup>b</sup> < indicates that the chemical was analyzed for but was not detected; the associated numerical value is the sample practical quantitation limit
- <sup>c</sup> general minerals (calcium, iron, magnesium, potassium, and sodium) are not presented on the table
- <sup>d</sup> value exceeds established background level

**Acronyms/Abbreviations:**

- bgs – below ground surface
- IRP – Installation Restoration Program
- µg/kg – micrograms per kilogram
- mg/kg – milligrams per kilogram

**Review Qualifier:**

- J – estimated value

## Section 5 Site Characteristics

**Table 5-15**  
**Analytes Reported Above the Laboratory Detection Limit**  
**in Monitoring Wells After Removal Action, IRP Site 12**  
**(results reported in micrograms per liter)**

Analyte	OHM <sup>a</sup> MW-1	PWC <sup>b</sup> MW-1	OHM <sup>a</sup> MW-2	PWC <sup>b</sup> MW-2	OHM <sup>a</sup> MW-3	PWC <sup>b</sup> MW-3	OHM <sup>a</sup> MW-4	PWC <sup>b</sup> MW-4	OHM <sup>a</sup> MW-5	PWC <sup>b</sup> MW-5
<b>Volatile Organic Compounds</b>										
benzene	31	1.1	< 10	< 1	< 10	NS	< 10	< 1	< 10	< 1
ethylbenzene	121	< 1	< 10	< 1	< 10	< 1	< 10	< 1	< 10	< 1
toluene	1.0 J	< 1	< 10	< 1	< 10	< 1	< 10	< 1	< 10	< 1
xylene	38	< 1	< 10	< 1	< 10	< 1	< 10	< 1	< 10	< 1
<b>Semivolatile Organic Compound</b>										
naphthalene	25	< 5	< 10	< 5	< 10	< 5	< 10	< 5	< 10	< 5
<b>Organophosphorous Pesticide</b>										
No analytes reported above detection limits										
<b>Chlorinated Herbicide</b>										
No analytes reported above detection limits										
<b>Total Petroleum Hydrocarbons</b>										
IPH-g	1,600	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
IRPH	700	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500	< 500
<b>Dissolved Metals<sup>c</sup></b>										
aluminum	19,300	690	2,300	< 20	18.2 J	NS	101 J	< 20	50.3 J	< 20
arsenic	20.5	16	4.2 J	4.0	3.0 J	NS	7.0 J	8.0	5.7 J	2.0
barium	261	250	202	150	26.1 J	NS	23.1 J	25	31.1 J	74
chromium	29.3	< 3.9	3.2 J	< 3.7	< 1.2	NS	< 1.2	< 2.2	1.3 J	< 2.5
cobalt	23.2	< 1.1	3.0 J	< 1.1	2.3 J	NS	< 1.3	< 1.1	1.8 J	1.3
copper	49.1	< 3.0	< 3.6	3.6	< 3.6	NS	< 3.6	< 3.0	< 3.6	< 3.0
lead	47.5	5.0	3.0 J	17	< 1.3	NS	1.8 J	6.0	< 1.3	< 1.0
manganese	1,140	180	635	420	705	NS	37.5	110	1,010	1,900
nickel	28.1	5.9	2.6 J	8.3	< 1.8	NS	< 1.8	25	< 1.8	33
selenium	2.9	< 2.0	< 2.9	11	< 2.9	NS	< 2.9	14	< 2.9	7.0
thallium	2.3	< 1.0	< 2.3	< 1.0	< 2.3	NS	< 2.3	2.0	< 2.3	1.0
vanadium	138	20	10.6 J	7.8	3.4 J	NS	2.3 J	< 2.6	2.8 J	< 2.6
zinc	251	< 18	9.1 J	< 5.7	3.2 J	NS	11.6 J	< 5.0	< 2.8	< 5.8

## Notes:

<sup>a</sup> sampled by OHM after well installation in April 1996<sup>b</sup> sampled by PWC on 02 July 1997<sup>c</sup> the total metals results are in Section 5 of the ESI Report (BNI 1998b) and are not presented here because the dissolved metals (filtered samples) are more representative of metals concentrations in groundwater

(table continues)

**Table 5-15** (continued)

Acronyms/Abbreviations:

IRP – Installation Restoration Program

MW – monitoring well

NS – not sampled; monitoring well destroyed during removal action

OHM – OHM Remediation Services Corp.

PWC – (Navy) Public Works Center

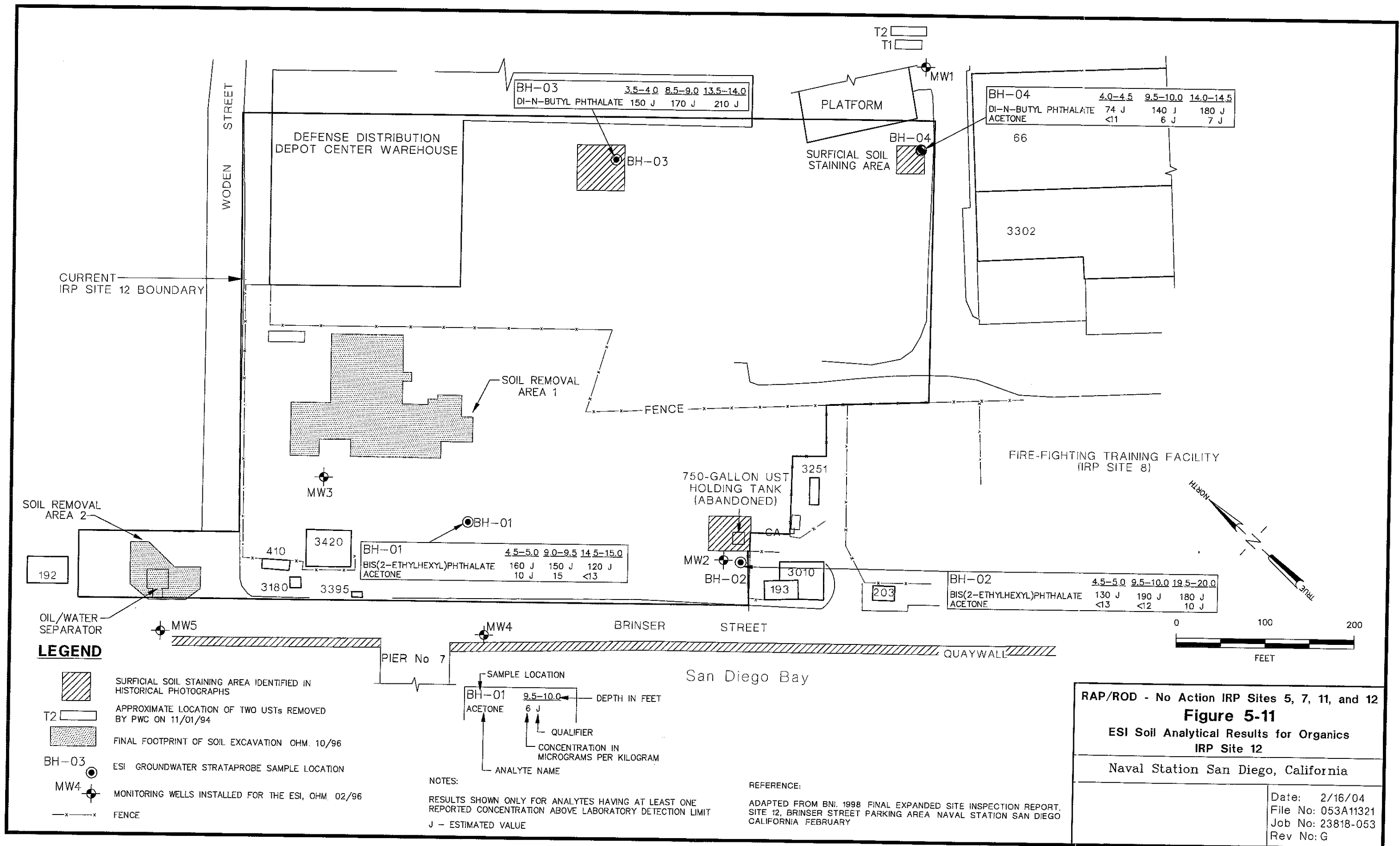
TPH-g – total petroleum hydrocarbons as gasoline

TRPH – total recoverable petroleum hydrocarbons

Review Qualifier:

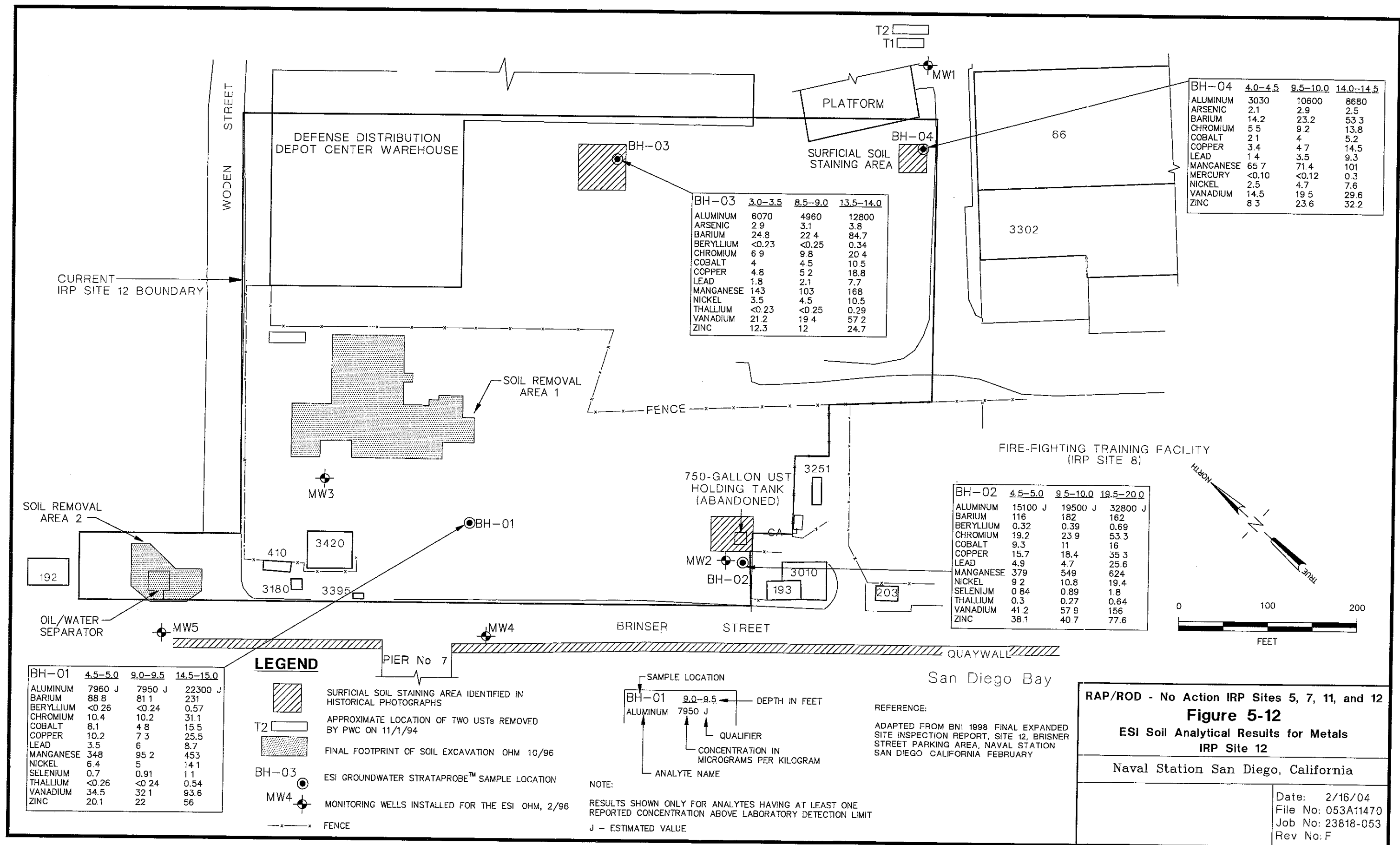
J – estimated value





RAP/ROD - No Action IRP Sites 5, 7, 11, and 12  
**Figure 5-11**  
ESI Soil Analytical Results for Organics  
IRP Site 12  
Naval Station San Diego, California

Date: 2/16/04  
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Job No: 23818-053  
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## Section 6

# CURRENT AND POTENTIAL SITE AND RESOURCE USES

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This section discusses the current and reasonably anticipated future land uses for IRP Sites 5, 7, 11, and 12 and current and potential groundwater and surface water uses for IRP Sites 7 and 12. A discussion of the groundwater and surface water use at IRP Sites 5 and 11 is unnecessary because investigation has shown no evidence of contamination. The site uses and resource uses contribute to development of realistic exposure scenarios in a baseline risk assessment.

## 6.1 LAND USES

Land uses at IRP Sites 5, 7, 11, and 12 are discussed below.

### 6.1.1 IRP Site 5

IRP Site 5, Admiral Baker Golf Course Landscaping-Debris Landfill, has been inactive since 1980. This site is currently covered with topsoil and vegetative cover, although debris was exposed in some areas (NEESA 1986, JEG and IT 1993). The Admiral Baker Golf Course staff will likely continue maintaining the landscaping-debris landfill in this way and are not expected to alter its morphology or develop the landfill (i.e., install a golf course fairway upon it) (JEG and IT 1993). Recreational uses are expected to continue at the Admiral Baker Golf Course (the location of IRP Site 5), and the surrounding areas are expected to continue to be used for residential and recreational purposes. IRP Site 5 is in an area north of the maintenance yard used by the golf course groundskeeping personnel; therefore, workers (i.e., human receptors) may be present during working hours in an area approximately 300 feet from IRP Site 5. Residences are built on the steep-sloped hills surrounding canyons approximately 200 feet to the north and west of IRP Site 5. The golf course occupies the gently sloping and flat-lying areas immediately to the east and south. Commercial and retail businesses occupy the low-lying areas on the southeast side of the golf course and the San Diego River. Land use is expected to remain similar in nature (JEG and IT 1993).

### 6.1.2 IRP Sites 7, 11, and 12

Because IRP Sites 7, 11, and 12 are at Naval Station San Diego, their future land use depends on the plans for the base. Naval Station San Diego is a fully operational base, supporting operations maintenance, training, administration, medical training, housing, community service, community support, retail business, recreation, and vacant or parking areas. Naval Station San Diego is not slated for closure, and future land-use changes are not planned (DON 1990).

#### 6.1.2.1 IRP SITE 7

IRP Site 7, Former Sewage Treatment Plant, is currently used as a parking lot. The site will continue to be used as a parking lot in the foreseeable future because one of the major needs at Naval Station San Diego is adequate parking for Navy shipboard personnel.

### **6.1.2.2 IRP SITE 11**

IRP Site 11, French Drain, receives condensate from the heating and ventilation system in Building 3053, and it is anticipated that the French drain will continue to be used. There are no plans for demolition of Building 3053 at this time. Industrial uses are expected to continue at Building 3053 (the location of IRP Site 11) and the immediate surrounding areas; therefore, workers (i.e., human receptors) may be present during working hours in the vicinity of IRP Site 11.

### **6.1.2.3 IRP SITE 12**

According to Naval Station San Diego personnel, the future use of IRP Site 12, Brinser Street Parking Area, will continue to be automobile parking on the west side and shipping and receiving on the east; however, the parking lot on the west side will also occasionally be used for temporary staging of military equipment. IRP Site 12 is completely paved with asphalt. Industrial uses are expected to continue in the immediate surrounding areas; therefore, workers (i.e., human receptors) may be present in the vicinity of IRP Site 12 during working hours (BNI 1998b).

## **6.2 GROUNDWATER USES AT IRP SITES 7 AND 12**

Naval Station San Diego, which includes IRP Sites 7 and 12, is within the Paradise and El Toyon Hydrologic Subareas of the National City Hydrologic Area in the Pueblo San Diego Hydrologic Unit (RWQCB 1995). The section of the National City Hydrologic Area west of Interstate Highway 5 (which includes the entire base) is designated in the Water Quality Control Plan for the San Diego Basin as having no beneficial groundwater uses (RWQCB 1995). Future beneficial groundwater uses are not anticipated at Naval Station San Diego and, therefore, would not be anticipated at IRP Sites 7 and 12.

## **6.3 SURFACE WATER USES AT IRP SITES 7 AND 12**

The RWQCB San Diego Region Water Quality Control Plan (RWQCB 1995) lists existing beneficial uses for coastal surface water that include industrial, navigational, recreational, commercial, and sport fishing as well as several ecological categories. The listed ecological uses for coastal surface water are estuarine habitat; wildlife habitat; rare, threatened, or endangered species habitat; marine habitat; migration of aquatic organisms; and shellfish harvesting.

Naval Station San Diego is in the coastal plain zone and lies within the Las Chollas drainage basin that includes Las Chollas, South Las Chollas, Switzer, and Paleta Creeks. Those drainages (except Switzer Creek) pass through Naval Station San Diego property. Urbanization within the Las Chollas, South Las Chollas, Switzer, and Paleta Creek watersheds (buildings and pavement) has significantly decreased the amount of natural soil cover once available for direct infiltration of precipitation and has increased the amount of surface runoff and flooding during storms.

## Section 6 Current and Potential Site and Resource Uses

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Surface water runoff at Naval Station San Diego, including runoff from IRP Sites 7 and 12, discharges to San Diego Bay either through the DON-owned and -maintained storm drain system or via the Las Chollas and Paleta Creeks that drain into the bay. The two creeks consist of unlined channels within the confines of the base, and both have been dredged and widened west of Harbor Drive.

There is currently no plan to modify the surface water drainage or surface water uses at Naval Station San Diego (including IRP Sites 7 and 12).

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## Section 7

# SUMMARY OF SITE RISKS

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Human-health and ecological risk assessments were conducted for IRP Site 7 during the RI and for IRP Site 12 during the ESI; they are summarized below. A risk assessment was not necessary for IRP Sites 5 and 11 because there was no evidence of a release of hazardous substances at these sites.

The analytical results for COCs were compared to the U.S. EPA Region 9 PRGs published at the time of the SWAT for IRP Site 5 (JEG and IT 1993) and the limited subsurface soil and groundwater assessment for IRP Site 11 (PTES 1996). The reports from these investigations were used as the basis for the NFA determination by the regulatory agencies. The PRGs were based on an allowable excess lifetime cancer risk of 1 in 1 million and, for noncancer risk, a hazard index (HI) of 1.

On the basis of site histories, visual inspections, field investigations, and laboratory analytical results, as recorded in the documents included in References (Section 10), the DON has determined that IRP Sites 5 and 11 do not contain hazardous materials. The DON has also determined that the existing condition of the sites is protective of human health and the environment.

Sections 7.1 and 7.2 summarize the results of the baseline risk assessment of IRP Sites 7 and 12, respectively. The assessments each comprised a four-step process as follows.

1. The first step identified the chemicals that should be subjected to the risk assessment.
2. The second step identified appropriate exposure scenarios and exposure routes and calculated chemical dose.
3. The third step evaluated the toxicological properties of the COPCs and established dose-response relationships.
4. The fourth step computed cancer and noncancer risk, the latter expressed as an HI.

The HHRA for IRP Sites 7 and 12 were performed in accordance with guidelines presented in the U.S. EPA Risk Assessment Guidance for Superfund Manual (U.S. EPA 1989, 1991) and the Risk Assessments of Hazardous Waste Sites and Permitted Facilities Manual (DTSC 1992).

Section 7.3 summarizes the results of the ERA, and Section 7.4 presents the basis for the risk management decisions for IRP Sites 7 and 12.

## 7.1 IRP SITE 7 BASELINE RISK ASSESSMENT

An HHRA was conducted for IRP Site 7 as part of the RI using data from the RSE and previous investigations (BEI 2002a). The HHRA methodology is provided in Sections 4 and 5 of the RI Report (BEI 2002a). The objective of the risk assessment conducted during the RI was to revise a previous baseline risk assessment for a hypothetical resident to incorporate current guidelines. The revised risk assessment for the adult resident conducted during the RI is considered a baseline risk assessment and provides the basis for the NFA decision.

### 7.1.1 Identification of Chemicals of Potential Concern

Following the validation and data quality assessment processes, COPCs were selected on the basis of appropriate U.S. EPA guidance (U.S. EPA 1989). The selection process began by listing all chemicals positively identified in soil samples. Positively detected contaminants include those with qualifiers that indicate known identities and estimated concentrations (e.g., J-qualified data). Inorganic nutrients that are required by humans (i.e., iron, calcium, magnesium, potassium, or sodium) were excluded as COPCs because relatively high concentrations of these inorganic nutrients are required to produce toxic effects and they occur naturally at widely varying concentrations in soil (U.S. EPA 1989).

The selection of soil COPCs at IRP Site 7 was based on data collected from 1.5 to 10 feet bgs as required for residential receptors. Soil data from the upper 1.5 feet of the site were not collected at IRP Site 7 because IRP Site 7 was extensively regraded between 1983 and 1985 and covered with sandy gravel to depths up to 1.5 feet as a subgrade prior to paving in 1994. This sandy gravel layer is not representative of possible contamination at the site.

Concentrations of metals in soil were compared with background concentrations to determine if on-site concentrations were less than, greater than, or equal to background. The approach was based on a comparison of maximum detected on-site concentrations to the 95th percentile of the background data (background threshold) presented in the final Background Study Report for Soils at Naval Station San Diego (BNI 1996a). Hexavalent chromium concentrations exceeding 4.8 percent of the background concentration for total chromium were considered to be above background, as recommended in the Addendum to the final Background Study Report (BNI 1998a).

A comparison of maximum concentrations detected in IRP Site 7 soil with Naval Station San Diego background concentrations was presented in the final RI Report (BEI 2002a). On the basis of this comparison, arsenic, beryllium, hexavalent chromium, and copper were eliminated as IRP Site 7 COPCs. Seventy-one COPCs (presented in the final RI Report), including VOCs, SVOCs, pesticides, Aroclors, and inorganics, were identified in the soil sample data (Table 7-1).

### 7.1.2 Exposure Assessment

The objective of the exposure assessment was to evaluate the type and magnitude of potential exposures to COPCs by a human receptor. An exposure assessment is a multistage process. First, potential human receptors are identified. Then the complete exposure pathways and routes by which these receptors are likely to be exposed are identified. Finally, EPCs for each chemical to which the receptors might be exposed and the chemical-intake rates associated with each route of exposure are quantified.

Table 7-1 lists the EPC calculated for each COPC. The analytical results from the 2003 supplemental soil sampling are not included in Table 7-1 and were not used to calculate the EPCs. The following sections describe the receptor identification and exposure pathways.



## Section 7 Summary of Site Risks

**Table 7-1**  
**Residential Soil Exposure Point Concentrations for COPCs, IRP Site 7**

CAS No.	Chemical	No. of Detects/ Detection Frequency (%)	Maximum Reported Concentration <sup>a</sup> (mg/kg)	Exposure Point Concentration <sup>b</sup> (mg/kg)	Distribution <sup>c</sup>
120-82-1	1,2,4-trichlorobenzene <sup>d</sup>	2 / 2.9	0.27	0.27	Not evaluated
95-50-1	1,2-dichlorobenzene <sup>e</sup>	1 / 1.5	0.18	0.18	Not evaluated
106-46-7	1,4-dichlorobenzene	5 / 7.3	0.51	0.19	Nonparametric
78-93-3	2-butanone	14 / 21.5	0.17	0.006	Nonparametric
91-57-6	2-methylnaphthalene	15 / 21.4	1.9	0.19	Nonparametric
72-54-8	4,4'-DDD <sup>d</sup>	2 / 3.1	0.012	0.012	Not evaluated
72-55-9	4,4'-DDE	14 / 21.5	0.29	0.00829	Nonparametric
50-29-3	4,4'-DDI	5 / 7.7	0.0159	0.00452	Nonparametric
106-47-8	4-chloroaniline	22 / 31.9	2.6	0.215	Nonparametric
108-10-1	4-methyl-2-pentanone <sup>d</sup>	2 / 31	0.027	0.027	Not evaluated
106-44-5	4-methylphenol <sup>d</sup>	3 / 4.4	1.10	1.10	Not evaluated
83-32-9	acenaphthene	5 / 7.2	0.16	0.125	Lognormal
67-64-1	acetone	43 / 66.2	1.1	0.0515	Nonparametric
319-84-6	alpha-BHC <sup>d</sup>	1 / 1.5	0.000384	0.000384	Not evaluated
5103-71-9	alpha-chlordane	4 / 6.1	0.00266	0.00174	Nonparametric
7429-90-5	aluminum	49 / 100	27,300	12,700	Normal
120-12-7	anthracene	11 / 15.9	0.26	0.185	Nonparametric
7440-36-0	antimony	4 / 6.9	9.4	5.75	Nonparametric
7440-39-3	barium	69 / 98.6	295	103	Nonparametric
56-55-3	benz(a)anthracene	23 / 33.3	0.71	0.185	Nonparametric
50-32-8	benzo(a)pyrene	12 / 17.4	0.62	0.19	Nonparametric
205-99-2	benzo(b)fluoranthene	23 / 33.3	0.82	0.19	Nonparametric
207-08-9	benzo(k)fluoranthene	19 / 27.5	0.57	0.185	Nonparametric
117-81-7	bis(2-ethylhexyl)phthalate	48 / 68.6	16	0.19	Nonparametric
85-68-7	butyl benzyl phthalate <sup>d</sup>	3 / 4.3	0.2	0.20	Not evaluated
7440-43-9	cadmium	18 / 25.7	8	0.467	Nonparametric
86-74-8	carbazole <sup>d</sup>	3 / 6.1	0.094	0.094	Not evaluated
75-15-0	carbon disulfide	6 / 9.2	0.022	0.0055	Nonparametric
7440-47-3	chromium	70 / 100	127	0.184	Nonparametric
218-01-9	chrysene	26 / 37.1	0.72	0.19	Nonparametric
7440-48-4	cobalt	56 / 80	85.4	7.48	Nonparametric
57-12-5	cyanides <sup>d</sup>	2 / 12.5	1.0	1.0	Not evaluated
84-74-2	di-n-butyl phthalate	18 / 26.1	0.061	0.02	Nonparametric
117-84-0	di-n-octyl phthalate	10 / 14.5	0.39	0.19	Nonparametric

(table continues)

Table 7-1 (continued)

CAS No.	Chemical	No. of Detects/ Detection Frequency (%)	Maximum Reported Concentration <sup>a</sup> (mg/kg)	Exposure Point Concentration <sup>b</sup> (mg/kg)	Distribution <sup>c</sup>
132-64-9	dibenzofuran <sup>d</sup>	2 / 2.9	0.071	0.071	Not evaluated
60-57-1	dieldrin <sup>d</sup>	1 / 1.5	0.00345	0.00345	Not evaluated
84-66-2	diethyl phthalate <sup>d</sup>	2 / 2.9	0.16	0.16	Not evaluated
1031-07-8	endosulfan sulfate <sup>d</sup>	1 / 1.5	0.00378	0.00378	Not evaluated
959-98-8	endosulfan I <sup>d</sup>	1 / 1.5	0.024	0.024	Not evaluated
33213-65-9	endosulfan II <sup>d</sup>	1 / 1.5	0.00339	0.00339	Not evaluated
72-20-8	endrin <sup>c</sup>	2 / 3.1	0.00879	0.00879	Not evaluated
7421-93-4	endrin aldehyde <sup>d</sup>	1 / 2.0	0.0038	0.00380	Not evaluated
100-41-4	ethylbenzene	5 / 7.7	0.048	0.0055	Nonparametric
206-44-0	fluoranthene	29 / 41.4	1.3	0.19	Nonparametric
86-73-7	fluorene	9 / 13.0	0.21	0.185	Nonparametric
5103-74-2	gamma-chlordane <sup>d</sup>	1 / 1.5	0.00139	0.00139	Not evaluated
1024-57-3	heptachlor epoxide <sup>d</sup>	1 / 1.5	0.000891	0.000891	Not evaluated
193-39-5	indeno(1,2,3-cd)pyrene <sup>d</sup>	3 / 4.4	0.16	0.160	Not evaluated
78-59-1	isophorone <sup>d</sup>	1 / 1.5	0.18	0.18	Not evaluated
7439-92-1	lead	67 / 95.7	197	12.2	Nonparametric
7439-96-5	manganese	49 / 100	1,000	416	Lognormal
7439-97-6	mercury	37 / 53.6	4.1	0.1581	Nonparametric
72-43-5	methoxychlor <sup>d</sup>	3 / 4.6	0.0078	0.0078	Not evaluated
75-09-2	methylene chloride	24 / 36.9	0.067	0.006	Nonparametric
7439-98-7	molybdenum	6 / 28.6	2.8	0.80	Nonparametric
86-30-6	n-nitrosodiphenylamine <sup>d</sup>	2 / 3.7	0.23	0.23	Not evaluated
91-20-3	naphthalene	10 / 14.5	0.53	0.19	Nonparametric
7440-02-0	nickel	60 / 85.7	72.3	16	Lognormal
11097-69-1	Aroclor 1254	28 / 39.4	2.92	0.090	Nonparametric
11096-82-5	Aroclor 1260	6 / 8.5	1.6	0.0385	Nonparametric
85-01-8	phenanthrene	21 / 30	1.3	0.19	Nonparametric
108-95-2	phenol	21 / 30.4	1.4	0.215	Nonparametric
129-00-0	pyrene	32 / 45.7	2.3	0.19	Nonparametric
7782-49-2	selenium <sup>d</sup>	1 / 1.4	0.52	0.52	Not evaluated
7440-22-4	silver	28 / 40	31.4	2.47	Nonparametric
127-18-4	tetrachloroethene <sup>d</sup>	2 / 3.1	0.008	0.008	Not evaluated
108-88-3	toluene	8 / 12.3	0.044	0.0055	Nonparametric
1330-20-7	total xylenes	10 / 15.4	0.29	0.006	Nonparametric
79-01-6	trichloroethene <sup>d</sup>	2 / 3.1	0.004	0.004	Not evaluated

(table continues)

## Section 7 Summary of Site Risks

Table 7-1 (continued)

CAS No.	Chemical	No. of Detects/ Detection Frequency (%)	Maximum Reported Concentration <sup>a</sup> (mg/kg)	Exposure Point Concentration <sup>b</sup> (mg/kg)	Distribution <sup>c</sup>
7440-62-2	vanadium	70 / 100	95	43.7	Normal
7440-66-6	zinc	60 / 85.7	507	109	Lognormal

## Notes:

- <sup>a</sup> table does not include results of 2003 supplemental soil sampling  
<sup>b</sup> exposure point concentration is the 95 percent upper confidence limit of the mean for normal and lognormal distributions, 95 percent upper confidence limit of the median for nonparametric, or the maximum where there are less than four detects  
<sup>c</sup> distribution not evaluated where there were less than four detects  
<sup>d</sup> the maximum concentration was used as the exposure point concentration

## Acronyms/Abbreviations:

BHC – benzene hexachloride  
CAS – Chemical Abstracts Service (number)  
COPC – chemical of potential concern  
DDD – dichlorodiphenyldichloroethane  
DDE – dichlorodiphenyldichloroethene  
DDT – dichlorodiphenyltrichloroethane  
IRP – Installation Restoration Program  
mg/kg – milligrams per kilogram  
PCB – polychlorinated biphenyl

## 7.1.2.1 EXPOSURE SCENARIOS

Receptor identification is a conceptualized site-specific scenario that identifies the human population at risk and the exposure-related activities. Exposure settings are typically based on land use.

Naval Station San Diego is currently used as a military base and, in general, its land use can be classified as industrial. IRP Site 7 is an asphalt-paved parking lot, so the primary current human receptors are people who use the parking lot. Because the asphalt pavement prevents these receptors from direct contact with the contaminated soil and retards chemical vapors from entering the atmosphere, the chemicals in the soil do not present a current risk provided the asphalt pavement remains intact.

The DON has no plans to vacate Naval Station San Diego, and it is unlikely that IRP Site 7 will be used as anything other than a parking lot in the foreseeable future because of the need for adequate parking for Navy shipboard personnel. However, the DON prefers to close sites at Naval Station San Diego without imposing institutional controls, if technologically and economically feasible (DoD 2000). To provide risk managers with the information needed to make future land-use decisions, risk was evaluated assuming a residential land-use scenario. Assumptions used for residential-receptor exposure are the most conservative for all human-health risk scenarios. Sites that do not pose a risk under residential-exposure conditions would not pose unacceptable risk under other land-use scenarios (e.g., industrial).

### 7.1.2.2 EXPOSURE PATHWAYS

An exposure pathway is the means by which a contaminant moves through the environment from the source to a receptor. Exposure pathways are identified through an analysis of the distribution of the COPCs in the environment and the physical and chemical properties of the COPCs. For a pathway to be complete, all the following elements must be present:

- contaminant source and mechanism for contaminant release
- environmental transport medium
- exposure point
- exposure route

Intake values for each pathway were assessed in combination with toxicity values to characterize carcinogenic and noncarcinogenic health risk to the residential receptor.

Hypothetical residents could be exposed to COPCs in the soil via the following exposure pathways:

- ingestion of impacted soil
- dermal contact with impacted soil
- inhalation of particulates that have been released from impacted soil
- inhalation of vapors that have been released from impacted soil

Groundwater exposure pathways were not included in the risk assessment for hypothetical residents for the following reasons.

- The groundwater has been designated nonbeneficial for domestic consumption, and no ingestion pathway is present.
- Groundwater is too deep to be directly contacted in a residential setting, so no dermal contact with the water is possible.
- Only four VOCs were reported above detection limits in the groundwater, each at concentrations below 25 µg/L.

Exposure values assigned to parameters in the dose formulas are included in Table 7-2.

### 7.1.3 Toxicity Assessment

The objective of the toxicity assessment is to determine the relationship between dose and toxic response for each COPC. From this relationship, an estimate of toxic potency is developed for use in characterizing risk. The toxicity assessment identifies toxicity criteria for each COPC and specifies the kinds of effects each chemical can produce. Toxicological chemical effects fall into two categories: those that could potentially cause cancer (carcinogens) and those that could cause other types of health effects (e.g., liver damage [noncarcinogens]).

## Section 7 Summary of Site Risks

**Table 7-2**  
**Values Assigned to the Parameters in the Dose Formulas<sup>a</sup>, IRP Site 7**

Equation Parameter	Unit	Resident Child <sup>b</sup>	Resident Adult <sup>c</sup>
<b>Soil Ingestion</b>			
Intake rate	mg/day	200	100
Fraction of ingested soil	Unitless	1	1
Exposure frequency	Days/year	350	350
<b>Soil Dermal Contact</b>			
Adherence factor <sup>d</sup>	mg/cm <sup>2</sup>	0.2	0.07
Exposed skin area <sup>d</sup>	cm <sup>2</sup>	2,900	5,700
Dermal absorption factor	Unitless	Chemical specific	
Exposure frequency	Days/year	350	350
<b>Inhalation of Volatiles or Soil Particulates</b>			
Inhalation rate	m <sup>3</sup> /hour	0.42	0.83
Exposure time	Hours/day	24	24
Exposure frequency	Days/year	350	350
<b>General Parameters</b>			
Exposure duration (cancer and noncancer)	Years	6	30
Body weight	Kilograms	15	70
Averaging time (cancer)	Days	25,550	25,550
Averaging time (noncancer)	Days	2,190 <sup>e</sup>	10,950

**Notes:**

- <sup>a</sup> see Appendix D of final RI Report (BEI 2002a) for a detailed description of the formulas
- <sup>b</sup> resident child age is 0 to 6 years
- <sup>c</sup> resident adult exposure was assumed for a total of 30 years: 6 years as a child and 24 years as an adult
- <sup>d</sup> DTSC 2000b
- <sup>e</sup> exposure duration × 365

**Acronyms/Abbreviations:**

- cm<sup>2</sup> – square centimeters
- IRP – Installation Restoration Program
- mg/cm<sup>2</sup> – milligrams per square centimeter
- mg/day – milligrams per day
- m<sup>3</sup>/hour – cubic meters per hour
- RI – remedial investigation

Each toxicological chemical effect is described by assigning a toxicity factor. Toxicity factors are numbers that indicate the toxicity of the chemicals. The toxicity factor for carcinogenic effects is called a “cancer slope factor” (CSF), and the toxicity factor for noncarcinogenic effects is called a “reference dose” (RfD). Chemicals that show a potential for both carcinogenic and noncarcinogenic health effects are assigned both CSFs and RfDs.

The specific sources for the toxicity criteria are discussed in Section 4 of the final RI Report (BEI 2002a). Both U.S. EPA and Cal/EPA toxicity criteria were implemented in the risk assessment. Use of Cal/EPA toxicity values in addition to the U.S. EPA CSFs permits dual tracking of the cancer risk, which consists of a risk assessment evaluation using U.S. EPA toxicity values and a separate risk evaluation using both U.S. EPA and Cal/EPA toxicity values. When no oral or inhalation RfD was available for a COPC, the chemical was assigned the oral and inhalation RfD of a surrogate chemical of similar structure or chemical class.

#### 7.1.4 Risk Characterization for IRP Site 7

Estimates of the potential cancer risk and occurrence of adverse systemic toxicity associated with COPCs in soil at IRP Site 7 were calculated for hypothetical resident receptors. The following equation specified in the U.S. EPA Risk Assessment Guidance for Superfund (U.S. EPA 1989) for estimating cancer risk was used:

$$\text{cancer risk} = \text{CSF} \times \text{estimated dose}$$

The following equation for estimating noncancer risk (U.S. EPA 1989) was used:

$$\text{noncancer hazard quotient (HQ)} = \text{estimated dose rate/RfD}$$

Toxic effects may occur when the HQ exceeds 1. A conservative estimate of the hazard associated with exposure to all chemicals by a specific pathway, such as the inhalation pathway, is obtained by summing the HQs of the chemicals associated with the pathway to determine the HI.

Cancer and noncancer risk results for these receptors and the COPCs identified as risk drivers are presented in Tables 7-3 and 7-4.

Risk results are discussed in the context of the NCP. The NCP states that the generally acceptable risk range representing an excess upper-bound lifetime cancer risk to an individual lies between 1 in 10,000 ( $10^{-4}$ ) and 1 in 1 million ( $10^{-6}$ ). The exposure levels associated with this risk range are determined by using information on the relationship between dose and response, with  $10^{-6}$  being the point of departure when applicable or relevant and appropriate requirements (ARARs) are not available or sufficiently protective. For systemic toxicants, acceptable exposure levels are concentrations to which the human population, including sensitive subgroups, may be exposed without adverse effects during a lifetime or part of a lifetime (NCP [40 *Code of Federal Regulations* § 300.430(d)(A)(2)]). Here, the highest acceptable exposure level can be interpreted as one that is equal to the highest estimated nontoxic exposure level.

## Section 7 Summary of Site Risks

**Table 7-3**  
**Summary of Lifetime Cancer Risk and Hazard Indices by Pathway, IRP Site 7**

Exposure Route	Cancer Risk U.S. EPA*	Cancer Risk State*	Hazard Index
<b>IRP Site 7 – Resident Adult</b>			
Incidental dermal contact	1.6E-06	2.6E-06	0.0079
Vapor inhalation	7.4E-09	1.6E-08	0.00028
Dust inhalation	8.8E-8	2.6E-09	0.0082
Incidental ingestion	3.3E-06	5.8E-06	0.066
<b>Total</b>	<b>5.0E-06</b>	<b>8.4E-06</b>	<b>0.083</b>
<b>IRP Site 7 – Resident Child</b>			
Incidental dermal contact	1.0E-06	1.7E-06	0.053
Vapor inhalation	2.7E-09	5.9E-09	0.00066
Dust inhalation	3.3E-08	9.6E-10	0.019
Incidental ingestion	2.3E-06	4.0E-06	0.62
<b>Total</b>	<b>3.4E-06</b>	<b>5.7E-06</b>	<b>0.69</b>

Note:

\* risk was calculated using U.S. EPA or California Environmental Protection Agency toxicity values

Acronyms/Abbreviations:

IRP – Installation Restoration Program

U.S. EPA – United States Environmental Protection Agency

#### 7.1.4.1 CANCER RISK ESTIMATES

Two cancer risk estimates are presented for each receptor type. The first estimate is based exclusively on U.S. EPA CSFs. The second estimate is based on a combination of U.S. EPA and Cal/EPA CSFs. Cancer risk estimates based on the first 6 years of exposure are always lower than estimates based on 30 years of exposure. Therefore, to simplify the presentation of the results, Section 7 discusses only resident adult cancer risks (which includes a childhood period of 6 years and 24 years as an adult). For the resident adult, both estimates are based on exposure of a person from birth to the age of 30 years.

#### 7.1.4.2 HAZARD INDEX ESTIMATES

Total HIs are shown for each intake route and across all intake routes. The doses on which HIs are based are averaged over the duration of exposure (30 years). As a child, the person weighs less and is assumed to consume soil at a greater rate. This causes the dose (and the HI) for the child to be higher than the dose to the person over the entire

**Table 7-4**  
**Summary of Cancer Risk Drivers, IRP Site 7**

Receptor	U.S. EPA Cancer Risk <sup>a,b</sup>	Risk Driver <sup>a,b</sup>	Medium	Cancer Risk <sup>c</sup> (%)	State Cancer Risk <sup>a,b</sup>	Risk Driver <sup>a,b</sup>	Medium	Cancer Risk <sup>c</sup> (%)
Resident adult	5.0E-06	benzo(a)pyrene EPC: 1.9E-01 mg/kg Risk: 3.2E-06	Soil	64	8.4E-06	benzo(a)pyrene EPC: 1.9E-01 mg/kg Risk: 5.3E-06	Soil	63
		Aroclor 1254 EPC: 9.0E-02 mg/kg Risk: 4.2E-07	Soil	8		benzo(b)fluoranthene EPC: 1.9E-01 mg/kg Risk: 5.3E-07	Soil	6
		benzo(b)fluoranthene EPC: 1.9E-01 mg/kg Risk: 3.2E-07	Soil	6		benzo(k)fluoranthene EPC: 1.9E-01 mg/kg Risk: 5.2E-07	Soil	6
		benz(a)anthracene EPC: 1.9E-01 mg/kg Risk: 3.1E-07	Soil	6		benz(a)anthracene EPC: 1.9E-01 mg/kg Risk: 5.2E-07	Soil	6
		indeno(1,2,3-cd)pyrene EPC: 1.6E-01 mg/kg Risk: 2.7E-07	Soil	5		indeno(1,2,3-cd)pyrene EPC: 1.6E-01 mg/kg Risk: 4.5E-07	Soil	5

**Notes:**

- <sup>a</sup> risk was calculated using U.S. EPA or California Environmental Protection Agency toxicity values
- <sup>b</sup> the residential cancer risk is higher for the resident adult; therefore, only the resident adult risk results are shown
- <sup>c</sup> only those chemicals that contribute at least 5 percent to the total risk are presented

**Acronyms/Abbreviations:**

EPC – exposure point concentration  
 IRP – Installation Restoration Program  
 mg/kg – milligrams per kilogram  
 U.S. EPA – United States Environmental Protection Agency



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## Section 7 Summary of Site Risks

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30-year exposure period. Thus, the discussion of the systemic toxicity results is limited to the resident child noncancer risk results.

### 7.1.4.3 HYPOTHETICAL RESIDENT EXCESS LIFETIME CANCER RISK

The excess lifetime cancer risk for a hypothetical adult resident exposed to IRP Site 7 soil for 24 hours a day, 350 days a year for 30 years was estimated to be within the NCP's generally acceptable risk range of  $10^{-6}$  to  $10^{-4}$ . Cancer risk across all intake routes and for all COPCs was estimated at  $5.0 \times 10^{-6}$  and  $8.4 \times 10^{-6}$  for risks quantified by U.S. EPA and Cal/EPA toxicity criteria, respectively. Soil ingestion and dermal contact were the dominant exposure pathways.

Table 7-3 presents cancer risk estimates for the residential receptor at IRP Site 7, and Table 7-4 illustrates the cancer risk to the residential receptor with the cancer risk drivers contributing at least 5 percent to the total hypothetical risk. Benzo(a)pyrene accounts for 63 to 64 percent of the cancer risk (Table 7-3). This PAH, occurring at an 18 percent detection frequency in soils between 1.5 and 10 feet bgs, is primarily present at an average greater than 5 feet bgs. Benzo(a)pyrene was detected in 12 of 65 soil samples collected from this interval. The reported values, from 0.028 mg/kg to 0.62 mg/kg, were qualified as estimated values with a "J" qualifier indicating uncertainty in the reported values. Therefore, the risk results should not be taken as a characterization of absolute risk. In addition, not all reported results were in excess of the residential soil PRG of 0.062 mg/kg, and the highest measured value was collected at 9 feet bgs.

### 7.1.4.4 HYPOTHETICAL RESIDENT SYSTEMIC TOXICITY

The HI for the hypothetical resident child exposed to soil at IRP Site 7 was estimated to be 0.69. Because this value is less than 1, systemic toxicity is unlikely. Table 7-3 presents the HI for IRP Site 7.

The risk of exposure to lead was assessed with a comparison of its EPC, 12.2 mg/kg, to the DTSC residential PRG-99 (concentration of lead in soil that would result in a 99th percentile estimate of blood lead of 150 micrograms per deciliter in a child) of 150 mg/kg. Because the PRG-99 is not exceeded, no adverse effects are anticipated from exposure to lead in soil at IRP Site 7.

## 7.2 IRP SITE 12 BASELINE RISK ASSESSMENT

An HHRA was conducted for IRP Site 12 during the ESI using data collected during the field work related to the ESI and data from previous investigations (BNI 1998b). The objective of the risk assessment was to determine the likelihood that exposure to residual chemicals (i.e., chemicals remaining in soil following the removal action) found in soil and groundwater poses a threat to human health and sensitive receptors if no further action is taken. The HHRA methodology is provided in Section 6 of the ESI Report (BNI 1998b). This is considered a baseline risk assessment and provides the basis for a no action decision.

## 7.2.1 Identification of Chemicals of Potential Concern

In accordance with appropriate U.S. EPA guidance (U.S. EPA 1989), the COPCs identified for soils at IRP Site 12 are those analytes that had been reported in soil above the detection limits (but not rejected during the data-validation process or adjusted per background concentrations) (BNI 1996a) during the previous investigations, including the ESI. Soil sample data for soils subsequently removed during the removal action were not included in the data set.

The COPCs identified for groundwater at IRP Site 12 are those analytes that had been reported above the detection limits in groundwater samples obtained from monitoring wells (but not rejected during the data-validation process) during the ESI.

At IRP Site 12, COPCs in soil were divided into two groups to assess potential risk. Soil data collected from the surface to approximately 2 feet bgs were used to evaluate risk for the industrial worker, and soil from the surface to approximately 10 feet bgs (unless higher concentrations of COPCs were in the surface samples) was used to evaluate risk for the construction worker and potential resident.

Tables 7-5 and 7-6, respectively, identify the inorganic and organic chemicals that were reported at least once in soil samples obtained from depths up to approximately 10 feet bgs. Table 7-7 lists the COPCs identified for the standard industrial scenario. The tables also identify the number of analyses performed for each chemical, the number of analyses producing concentrations above sample quantitation limits (SQLs), the detection frequency (values in column 3 divided by values in column 2), the highest reported concentration above SQLs, and the upper threshold of the background concentration of the metals for which thresholds have been established.

On the basis of a comparison of the maximum reported concentration and Naval Station San Diego background concentrations, the following inorganics were eliminated as IRP Site 12 COPCs: beryllium, chromium, copper, lead, and thallium. Additionally, hexavalent chromium was eliminated because it is a component of total chromium.

The COPCs in groundwater were identified in the same manner as those in soil. Table 7-8 lists the COPCs in groundwater, the highest reported concentration of each, and the well from which the sample with the highest reported concentration was collected. Detection frequencies are not shown because only two samples were collected from each well, making per-well detection frequencies meaningless. An attempt was made to establish groundwater background levels for inorganic constituents (BNI 1998a), but the temporal variability of groundwater suggests that the information collected might provide supportive but not definite evidences of natural occurrence. This information was used in risk management decisions but was not used to eliminate COPCs.

## Section 7 Summary of Site Risks

**Table 7-5**  
**Detection Frequency, Highest Reported Concentration, and Background Concentrations of**  
**Inorganic COPC Candidates Reported in Samples of Soil Shallower Than 12 Feet bgs<sup>a</sup>, IRP Site 12**

Inorganic COPC	Number of Analyses	Number of Analyses With Concentrations Exceeding SQL	Detection Frequency (percent)	Highest Reported Concentration (mg/kg)	Background Concentration (95th percentile)
aluminum	36	36	100	22,400	ND
antimony	71	2	3	53	ND
arsenic	72	42	58	33.8	9.0
barium	70	66	94	182	ND
beryllium <sup>b</sup>	71	4	6	0.6	3.6
cadmium	71	24	34	5.8	ND
chromium (+3) <sup>b,c</sup>	73	67	92	27.7	43.3
chromium (+6) <sup>d</sup>	25	13	52	0.2	ND
chromium (total) <sup>b</sup>	73	67	92	27.9	43.3
cobalt	74	29	39	15.1	ND
copper <sup>b</sup>	71	57	80	110	188.8
cyanide	71	21	30	3.2	ND
fluoride	24	24	100	2.2	ND
lead <sup>b</sup>	72	31	43	27	94.3
manganese	36	36	100	614	ND
mercury	72	16	22	1.2	ND
molybdenum	59	2	3	5	ND
nickel	72	29	40	20	ND
selenium	71	8	11	2.2	ND
thallium <sup>b</sup>	71	3	4	10	11.1
vanadium	72	70	97	73.5	ND
zinc	72	68	94	152	ND

**Notes:**

- <sup>a</sup> samples up to 12 feet deep were accepted if no samples were collected in the interval of 8 to 10 feet bgs
- <sup>b</sup> metal removed from further consideration because its highest reported concentration was less than the background threshold concentration
- <sup>c</sup> the highest reported and background concentrations of trivalent chromium were calculated by subtracting the highest reported and background concentrations of hexavalent chromium from the highest reported and background concentrations of total chromium (Section 7 of ESI Report [BNI 1998b])
- <sup>d</sup> removed from further consideration because it is a component of total chromium

**Acronyms/Abbreviations:**

bgs – below ground surface  
 COPC – chemical of potential concern  
 ESI – expanded site inspection  
 IRP – Installation Restoration Program  
 mg/kg – milligrams per kilogram  
 ND – not determined  
 SQL – sample quantitation limit

**Table 7-6**  
**Detection Frequency and Highest Reported Concentration of**  
**Organic COPC Candidates Reported in Samples of Soil**  
**Shallower Than 12 Feet bgs\*, IRP Site 12**

Organic COPC	Number of Analyses	Number of Analyses With Concentrations Exceeding SQL	Detection Frequency (percent)	Highest Reported Concentration (mg/kg)
acetone	38	7	18	0.25
anthracene	131	9	7	0.14
benzene	61	1	2	0.00006
benz(a)anthracene	131	4	3	0.082
benzo(a)pyrene	132	3	2	0.049
benzo(b)fluoranthene	132	1	1	0.12
benzo(k)fluoranthene	245	2	1	0.092
bis(2-ethylhexyl)phthalate	24	12	50	1.8
butyl benzyl phthalate	13	3	23	1.7
chloroform	21	2	10	0.00015
chrysene	132	5	4	0.13
di-n-butylphthalate	36	24	67	11
1,1-dichloroethane	21	2	10	0.0014
fluoranthene	137	11	8	0.91
naphthalene	134	1	1	0.29
phenanthrene	132	15	11	13
phenol	12	3	25	1.7
pyrene	132	10	8	0.36
trichloroethene	21	2	10	0.0014
xylene	9	1	11	0.0014

**Note:**

- \* samples up to 12 feet deep were accepted if no samples were collected in the interval of 8 to 10 feet bgs

**Acronyms/Abbreviations:**

- bgs – below ground surface  
 COPC – chemical of potential concern  
 IRP – Installation Restoration Program  
 mg/kg – milligrams per kilogram  
 SQL – sample quantitation limit

## Section 7 Summary of Site Risks

**Table 7-7**  
**Detection Frequency and Highest Reported Concentration of Inorganic and Organic COPCs in Samples of Soil Shallower Than 2 Feet bgs\*, IRP Site 12**

COPC	Number of Analyses	Number of Analyses With Concentrations Exceeding SQL	Detection Frequency (percent)	Highest Reported Concentration (mg/kg)
aluminum	4	4	100	22,400
antimony	11	0	0	30 U
arsenic	11	10	90.1	3.3
barium	11	9	81.8	170
cadmium	11	6	54.5	5
cobalt	11	4	36.4	2.6
cyanide	12	6	50	2.2
fluoride	0	0	0	0
manganese	4	4	100	614
mercury	11	5	45.4	3.7
molybdenum	7	1	14.3	0.41
nickel	11	3	27.3	14
selenium	11	3	27.3	2.2
vanadium	11	10	90.1	54.4
zinc	11	11	100	152
acetone	3	3	100	0.09
anthracene	11	1	9.1	0.011
benzene	3	0	0	0.011 U
benz(a)anthracene	11	0	0	7.2 U
benzo(a)pyrene	11	0	0	7.2 U
benzo(b)fluoranthene	11	0	0	7.2 U
benzo(g,h,i)perylene	14	0	0	7.2 U
bis(2-ethylhexyl)phthalate	8	5	62.5	1.3
butyl benzyl phthalate	4	3	75	1.7
chloroform	3	0	0	0.011 U
chrysene	11	0	0	7.2 U
di-n-butylphthalate	12	8	66.7	10
1,1-dichloroethane	3	0	0	0.011 U
fluoranthene	11	3	27.3	0.015
naphthalene	11	0	0	7.2 U
phenanthrene	11	0	0	7.2 U
phenol	4	4	100	1.7
pyrene	11	3	27.3	0.022
trichloroethene	3	0	0	0.011 U
xylene	0	0	0	0

(table continues)

**Table 7-7 (continued)****Note:**

- \* chemicals listed are identical to those detected in samples from 0 to 10 (nominal) feet bgs; number of analyses, detection frequencies, and highest concentrations are those reported in samples from 0 to 2 feet bgs

**Acronyms/Abbreviations:**

- bgs – below ground surface
- COPC – chemical of potential concern
- IRP – Installation Restoration Program
- mg/kg – milligrams per kilogram
- SQL – sample quantitation limit

**Review Qualifier:**

- U – reported concentration is below SQL

## 7.2.2 Exposure Assessment

The exposure assessment for IRP Site 12 consists of the same three steps as the exposure assessment conducted for IRP Site 7. First the potential human receptors were identified, then the exposure pathways and routes were identified, and finally the EPCs for each chemical and the intake rates associated with each route of exposure were quantified.

### 7.2.2.1 EXPOSURE SCENARIOS

Currently, individuals at highest risk with regard to COPCs in soil are likely those that work in the warehouse at IRP Site 12. Because IRP Site 12 is completely paved and workers probably do not use the parking lot for any activity other than parking cars and shipping and receiving, direct contact with contaminated soil is unlikely to occur. The pavement covering the parking lot reduces emissions to the air and the possibility of direct contact with soil.

Although the DON does not *plan* any change in land use, because the land use *could* change in the future, a residential scenario was evaluated. Therefore, in addition to the warehouse worker, a future resident and a construction worker were also identified as potential receptors at IRP Site 12.

Hypothetical exposure assumptions based on the U.S. EPA and Cal/EPA standard industrial scenario were used to assess the potential risk to warehouse workers. The standard U.S. EPA assumptions were also used to assess potential risk to future residents.

The construction-worker scenario at IRP Site 12 assumed exposure to COPCs in both soil and groundwater to 10 feet bgs (because the water table is encountered at 8 feet bgs). If excavation work is performed at IRP Site 12, the work is likely to be associated with building construction or installation and repair of underground utilities. Such workers would handle soil and would, therefore, ingest soil at a higher rate than the standard industrial worker. The work would also be more strenuous; hence, their breathing rates would be higher than those of the standard industrial worker.

## Section 7 Summary of Site Risks

**Table 7-8**  
**Chemicals of Potential Concern in Groundwater<sup>a</sup>, IRP Site 12**

<b>COPC</b>	<b>Highest Reported Concentration<sup>b</sup> (mg/L)</b>	<b>Well Containing the Highest Reported Concentration</b>
aluminum	2.3	MW2
arsenic	0.008	MW4
barium	0.2	MW2
cobalt	0.003	MW2
diethyl phthalate	0.016	MW2 dup
lead	0.017	MW2
manganese	1.9	MW5
nickel	0.033	MW5
selenium	0.044	MW5 dup
thallium	0.002	MW4 and MW5 dup
vanadium	0.0106	MW2
zinc	0.012	MW4

**Notes:**

<sup>a</sup> the background threshold concentrations of the metals have not been determined

<sup>b</sup> highest concentrations for metals are those reported from dissolved (filtered) samples

**Acronyms/Abbreviations:**

COPC – chemical of potential concern

dup – duplicate

IRP – Installation Restoration Program

mg/L – milligrams per liter

**7.2.2.2 EXPOSURE PATHWAYS**

The following exposure routes were chosen to assess the potential risks posed by COPCs in the soil at IRP Site 12 to both the standard industrial worker and resident:

- ingestion of soil
- dermal contact with soil
- inhalation of airborne soil (dust)
- inhalation of airborne chemical vapors

The exposure routes chosen to assess the potential risks to the construction worker were all of the above plus dermal contact with groundwater. COPCs in the groundwater comprise metals and diethyl phthalate, none of which are volatile, therefore eliminating as a pathway the inhalation of airborne chemical vapors from groundwater. Incidental groundwater ingestion is unlikely in construction work. Therefore, the only groundwater-related exposure route for the construction worker is dermal contact.

Exposure assumptions are summarized in Table 7-9 and discussed in greater detail in Section 6 of the ESI Report (BNI 1998b).

Groundwater ingestion was not included in the risk assessment because groundwater underlying IRP Site 12 is saline, does not have current uses, and is classified by RWQCB San Diego Region as unsuitable for beneficial use. The groundwater flows toward San Diego Bay. Except for diethyl phthalate, all of the COPCs detected in groundwater are metals that occur naturally in the environment.

### 7.2.3 Toxicity Assessment

Section 7.1.3 describes the objective of the toxicity assessment step of the HHRA. Additional information specific to IRP Site 12 is presented in the final ESI Report (BNI 1998b). The RfDs and CSFs used in the risk assessment for IRP Site 12 are provided in Table 7-10.

For the purpose of the risk assessment, the 95 percent upper confidence limit (UCL) of the arithmetic mean of data sets with normal or lognormal distributions was computed in accordance with procedures recommended by U.S. EPA in the supplemental guidance document entitled Calculating the Concentration Term (U.S. EPA 1992). When the data had a nonparametric distribution, the highest reported concentration above the SQL was used as the EPC. The EPCs of COPCs in soil are summarized in Table 7-11.

### 7.2.4 Risk Characterization for IRP Site 12

Risk quantitation entails calculating two kinds of risk estimates: estimates of whether systemic effects are likely to occur (noncancer risk) and estimates of lifetime excess cancer risk. The former is calculated for each COPC, and the latter is calculated for each carcinogenic COPC. Both estimates are based on the calculated dose. The quantitation process for each kind of estimate was briefly described in Section 7.1.4.

The calculations were performed with a computerized risk program (BNI 1995b) that is designed specifically for hazardous waste site risk calculations. U.S. EPA (1989) and DTSC (1992) recommend that risks to a resident be computed for a child and for an adult, with 7 years representing the age at which a person becomes an adult. The risk program automatically sums the risk estimates for the resident child and adult and outputs two estimates, one for a child (age 6 years and less) and one for a child and an adult (age 30 years and less).

Estimates of total cancer risk and the computed total HIs are presented in Table 7-12. The table also identifies the cancer risk and hazard drivers and the cancer risk/HI associated with each driver. Two sets of cancer risk estimates and HIs are presented for the resident. The first set, identified by "child," is based on exposure of a child resident. The second set is based on exposure of a child and adult resident.



## Section 7 Summary of Site Risks

**Table 7-9**  
**Exposure Assumptions for Human-Health Risk Assessment<sup>a</sup>, IRP Site 12**

Parameter	Unit	RESIDENT		Standard Industrial Worker <sup>b</sup>	Construction Worker
		Child	Adult		
Averaging time					
Cancer risk (70 years × 365 days/year)	Day	25,550	25,550	25,550	25,550
Noncancer risk (ED × 365 days/year)		2,190	8,760	9,125	365
Body weight	Kilogram	15	70	70	70
Exposure time (inhalation only)	Hour/day	24	24	8	8
Exposure frequency					
Ingestion and inhalation	Days/year	350	350	250	250
Dermal		350	100	250	250
Exposure duration	Year	6	24	25	1
Intake rate					
Soil	mg/day	200	100	50	480
Air	m <sup>3</sup> /hour	0.42	0.83	0.83	2.5
Exposed skin area	cm <sup>2</sup>	2,000	5,800	5,800	5,800
Soil-skin adherence factor	mg/cm <sup>2</sup>	1	1	1	1
Fraction of soil ingested from site	Unitless	1	1	1	1

## Notes:

- <sup>a</sup> values assigned to independent dose equation parameters (excluding calculated parameters)  
<sup>b</sup> the industrial worker scenario assumes office work conditions where individuals perform light activities

## Acronyms/Abbreviations:

- cm<sup>2</sup> – square centimeters  
ED – exposure duration (in years)  
IRP – Installation Restoration Program  
m<sup>3</sup> – cubic meters  
mg – milligram

**Table 7-10**  
**U.S. EPA Reference Doses and Cancer Slope Factors, IRP Site 12**

Chemical Name	CAS Number	Carcinogen	FEDERAL		Estimated Cancer Class	U.S. EPA		ESTIMATED		U.S. EPA		U.S. EPA		U.S. EPA		CALCULATED			
			CANCER CLASS	Oral In		CSF <sup>a</sup>	Ref	ORAL	CSF	Ref	ORAL	CSF	Ref	INHALATION	CSF	Ref	DERMAL	CSF	Ref
acetone	67-64-1	NC	D	D	D	NA	NA	NA	NA	1.00E-01	I	1.00E-01	I	1.00E-01	R	1.00E-01	R		
aluminum	7429-90-5	NC	D	D	D	NA	NA	NA	NA	1.00E+00	N <sup>c</sup>	NA	N <sup>c</sup>	NA	R	1.00E+00	R		
anthracene	120-12-7	NC	D	D	D	NA	NA	NA	NA	3.00E-01	I	3.00E-01	I	3.00E-01	R	3.00E-01	R		
antimony and compounds	7440-36-0	NC	NE	NE	NE	NA	NA	NA	NA	4.00E-04	I	NA	I	NA	R	4.00E-04	R		
arsenic	7440-38-2	C	A	A	A	1.50E+00	I	1.50E+00	I	1.50E+00	R	3.00E-04	I	NA	R	3.00E-04	R		
barium and compounds	7440-39-3	NC	NE	NE	NE	NA	NA	NA	NA	7.00E-02	I	1.43E-04	I	1.43E-04	H2	7.00E-02	R		
benz(a)anthracene	56-55-3	C	B2	B2	B2	7.30E-01	N	7.30E-01	R	7.30E-01	R	3.00E-01	S	3.00E-01	S	3.00E-01	R		
benzene	71-43-2	C	A	A	A	2.90E-02	I	2.90E-02	I	2.90E-02	R	1.71E-03	R	1.71E-03	N	1.71E-03	R		
benzo(a)pyrene	50-32-8	C	B2	B2	B2	7.30E+00	I	7.30E+00	R	7.30E+00	R	3.00E-02	S	3.00E-02	S	3.00E-02	R		
benzo(b)fluoranthene	205-99-2	C	B2	B2	B2	7.30E-01	N	7.30E-01	R	7.30E-01	R	4.00E-02	S	4.00E-02	S	4.00E-02	R		
benzo(g,h,i)perylene	191-24-2	NC	D	D	D	NA	NA	NA	NA	3.00E-02	S	3.00E-02	S	3.00E-02	S	3.00E-02	R		
bis(2-ethylhexyl)phthalate	117-81-7	C	B2	B2	B2	1.40E-02	I	1.40E-02	R	1.40E-02	R	2.00E-02	I	2.20E-02	R	2.00E-02	R		
butyl benzyl phthalate	85-68-7	NC	NE	NE	NE	NA	NA	NA	NA	2.00E-01	I	2.00E-01	I	2.00E-01	R	2.00E-01	R		
cadmium and compounds	7440-43-9	C	B1	B1	B1	6.30E+00	I	6.30E+00	I	6.30E+00	R	5.00E-04	I	5.70E-05	X	5.00E-04	R		
chloroform	67-66-3	C	B2	B2	B2	6.10E-03	I	6.10E-03	I	6.10E-03	R	1.00E-02	I	1.00E-02	R	1.00E-02	R		
chrysene	218-01-9	C	B2	B2	B2	7.30E-03	N	7.30E-03	R	7.30E-03	R	3.00E-01	S	3.00E-01	S	3.00E-01	R		
cobalt	7440-48-4	NC	NE	NE	NE	NA	NA	NA	NA	6.00E-02	N	2.86E-04	N	2.86E-04	N	6.00E-02	R		
cyanide (free)	57-12-5	NC	D	D	D	NA	NA	NA	NA	2.00E-02	I	NA	I	NA	R	2.00E-02	R		
dibutyl phthalate	84-74-2	NC	D	D	D	NA	NA	NA	NA	1.00E-01	I	1.00E-01	I	1.00E-01	R	1.00E-01	R		
dichloroethane-1,1	75-34-3	NC	NE	NE	NE	NA	NA	NA	NA	1.00E-01	H2	1.43E-01	H2	1.43E-01	H2	1.00E-01	R		
fluoranthene	206-44-0	NC	D	D	D	NA	NA	NA	NA	4.00E-02	I	4.00E-02	I	4.00E-02	R	4.00E-02	R		
fluorine (soluble fluoride)	7782-41-4	NC	D	D	D	NA	NA	NA	NA	6.00E-02	I	6.00E-02	I	6.00E-02	R	6.00E-02	R		
manganese and compounds	7439-96-5	NC	D	D	D	NA	NA	NA	NA	4.67E-02	I	1.40E-05	I	1.40E-05	I	4.67E-02	R		
mercuric chloride	7487-94-7	NC	D	D	D	NA	NA	NA	NA	3.00E-04	I	3.00E-04	I	3.00E-04	R	3.00E-04	R		
methylene chloride	75-09-2	C	B2	B2	B2	7.50E-03	I	1.65E-03	I	6.00E-02	R	6.00E-02	I	8.57E-01	H2	6.00E-02	R		
molybdenum	7439-98-7	NC	D	D	D	NA	NA	NA	NA	5.00E-03	H2	5.00E-03	H2	5.00E-03	R	5.00E-03	R		
naphthalene	91-20-3	NC	D	D	D	NA	NA	NA	NA	4.00E-02	N	4.00E-02	N	4.00E-02	R	4.00E-02	R		
nickel and compounds	7440-02-0	NC	NE	NE	NE	NA	NA	NA	NA	2.00E-02	I	NA	I	NA	R	2.00E-02	R		
phenanthrene	85-01-8	NC	D	D	D	NA	NA	NA	NA	3.00E-01	S	3.00E-01	S	3.00E-01	S	3.00E-01	R		
phenol	108-95-2	NC	D	D	D	NA	NA	NA	NA	6.00E-01	I	6.00E-01	I	6.00E-01	R	6.00E-01	R		
pyrene	129-00-0	NC	D	D	D	NA	NA	NA	NA	3.00E-02	I	3.00E-02	I	3.00E-02	R	3.00E-02	R		
selenium	7782-49-2	NC	D	D	D	NA	NA	NA	NA	5.00E-03	I	NA	I	NA	R	5.00E-03	R		
trichloroethylene	79-01-6	C	B2	B2	B2	1.10E-02	N	6.00E-03	N	1.10E-02	R	6.00E-03	N	6.00E-03	R	6.00E-03	R		
vanadium	7440-62-2	NC	NE	NE	NE	NA	NA	NA	NA	7.00E-03	H2	NA	H2	NA	X	7.00E-03	R		
xylenes	1330-20-7	NC	D	D	D	NA	NA	NA	NA	2.00E+00	I	2.00E-01	I	2.00E-01	X	2.00E+00	R		
zinc	7440-66-6	NC	D	D	D	NA	NA	NA	NA	3.00E-01	I	NA	I	NA	R	3.00E-01	R		

(table continues)

**Table 7-10 (continued)**

**Notes:**

- <sup>a</sup> units in inverse of milligrams per kilograms per day
- <sup>b</sup> units in milligrams per kilograms per day
- <sup>c</sup> formerly known as ECAO

**Acronyms/Abbreviations:**

- A – human carcinogen
- B2 – probable human carcinogen with sufficient evidence in animals and inadequate or no evidence in humans
- C – carcinogenic
- CAS – Chemical Abstracts Service
- CSF – cancer slope factor
- D – not classifiable as to human carcinogenicity
- ECAO – Environmental Criteria and Assessment Office
- H2 – 1995 Health Effects Assessment Summary Table
- I – 1996 Integrated Risk Information System
- In – inhalation
- IRP – Installation Restoration Program
- N – 1994 National Center for Environmental Assessment
- NA – not available
- NC – noncarcinogenic
- NE – not established
- R – route-to-route extrapolation
- Ref – reference
- RfD – reference dose
- S – values based on surrogate chemical
- U.S. EPA – United States Environmental Protection Agency
- X – withdrawn from Integrated Risk Information System and/or Health Effects Assessment Summary Tables

**Table 7-11**  
**Exposure Point Concentrations of Chemicals of Potential Concern in Soil**  
**(results reported in milligrams per kilogram), IRP Site 12**

COPC	EXPOSURE POINT CONCENTRATION		Statistical Distribution of Reported Concentrations in Samples From Upper 10 Feet <sup>a</sup>	Statistic <sup>a</sup>
	Upper 2 Feet	Upper 10 Feet		
acetone	0.09	0.25	Nonparametric	HRC
aluminum	22,400	7,240	Lognormal	95% UCL
anthracene	0.011	0.14	Nonparametric	HRC
antimony <sup>b</sup>	53	53	Nonparametric	HRC
arsenic	3.03	8.79	Lognormal	95% UCL
barium	48.9	64.5	Lognormal	95% UCL
benz(a)anthracene <sup>b</sup>	0.082	0.082	Nonparametric	HRC
benzene <sup>b</sup>	0.00006	0.00006	Nonparametric	HRC
benzo(a)pyrene <sup>b</sup>	0.049	0.049	Nonparametric	HRC
benzo(b)fluoranthene <sup>b</sup>	0.12	0.12	Nonparametric	HRC
benzo(k)fluoranthene <sup>b</sup>	0.092	0.092	Nonparametric	HRC
bis(2-ethylhexyl)phthalate	1.3	1.8	Nonparametric	HRC
butylbenzylphthalate	1.7	1.7	Nonparametric	HRC
cadmium	5.0	5.8	Nonparametric	HRC
chloroform <sup>b</sup>	0.00015	0.00015	Nonparametric	HRC
chrysene <sup>b</sup>	0.13	0.13	Nonparametric	HRC
cobalt	2.6	15.1	Nonparametric	HRC
cyanide	2.2	3.2	Nonparametric	HRC
1,1-dichloroethane <sup>b</sup>	0.0014	0.0014	Nonparametric	HRC
di-n-butylphthalate	10.0	11	Nonparametric	HRC
fluoranthene	0.015	0.91	Nonparametric	HRC
fluoride	1.4	1.4	Normal	95% UCL
manganese	614	207	Lognormal	95% UCL
mercury	3.7	1.2	Nonparametric	HRC
molybdenum	0.41	5	Nonparametric	HRC
naphthalene <sup>b</sup>	0.29	0.29	Nonparametric	HRC
nickel	14.0	20	Nonparametric	HRC
phenanthrene <sup>b</sup>	13	13	Nonparametric	HRC
phenol	1.7	1.7	Nonparametric	HRC
pyrene	0.022	0.36	Nonparametric	HRC
selenium	2.2	2.2	Nonparametric	HRC
trichloroethene <sup>b</sup>	0.0014	0.0014	Nonparametric	HRC

(table continues)

## Section 7 Summary of Site Risks

Table 7-11 (continued)

COPC	EXPOSURE POINT CONCENTRATION		Statistical Distribution of Reported Concentrations in Samples From Upper 10 Feet <sup>a</sup>	Statistic <sup>a</sup>
	Upper 2 Feet	Upper 10 Feet		
vanadium	54.4	25.7	Lognormal	95% UCL
xylene	0.0014	0.0014	Nonparametric	HRC
zinc	152	33.4	Lognormal	95% UCL

## Notes:

<sup>a</sup> statistical distribution was based on concentrations in samples from 0 to 10 feet bgs; distribution of concentrations in samples from 0 to 2 feet bgs was assumed to be the same as for concentrations in the 0- to 10-foot bgs samples; exposure point concentrations were determined in accordance with the distributions

<sup>b</sup> found below its sample quantitation limit in the upper 2 feet of soil

## Acronyms/Abbreviations:

95% UCL – upper 95 percent confidence limit of the arithmetic mean

bgs – below ground surface

COPC – chemical of potential concern

HRC – highest reported concentration

IRP – Installation Restoration Program

**7.2.4.1 CANCER RISK**

For the standard industrial worker, the higher estimate of total cancer risk was  $6.4 \times 10^{-6}$ . This estimate was obtained when benzo(a)pyrene was assigned the CSF developed by Cal/EPA. The risk drivers were arsenic and benzo(a)pyrene, which together accounted for about 86 percent of the total cancer risk.

For the construction worker, the estimated total cancer risk was  $1.5 \times 10^{-6}$ , and arsenic in soil accounted for 87 percent of the total. The carcinogenic COPCs in groundwater contributed a risk of  $7.8 \times 10^{-8}$ .

For the resident, the estimated potential cancer risk was about  $3.3 \times 10^{-5}$ , with arsenic accounting for about 89 percent of the total and benzo(a)pyrene accounting for another 8 percent. There was no apparent pattern of distribution of reported arsenic concentrations in soil that would indicate a point source or sources for arsenic release. In addition, there is no known historical use of arsenic at IRP Site 12.

**7.2.4.2 NONCANCER RISK**

The total HIs for the standard industrial worker were much less than 1. It can, therefore, be concluded that the COPCs in the upper 2 feet of soil will not cause systemic toxicity to people who work indoors at IRP Site 12. The total HIs based on exposure of the construction worker and the resident exceed 1, which suggests that the concentrations of COPCs in the upper 10 feet of soil are high enough to cause systemic toxicity in construction workers and residents.

**Table 7-12**  
**Estimates of Excess Cancer Risk and Calculated Hazard Indices<sup>a</sup>, IRP Site 12**

Exposure Route	Cancer Risk U.S. EPA <sup>a</sup>	Cancer Risk State <sup>a</sup>	Hazard Index
<b>IRP Site 12 – Resident Adult</b>			
Incidental dermal contact	8.9E-06	9.8E-06	0.059
Vapor inhalation	5.3E-10	5.3E-10	0.00012
Dust inhalation	7.8E-07	1.1E-06	0.13
Incidental ingestion	2.1E-05	2.2E-05	0.27
<b>Total</b>	<b>3.1E-05</b>	<b>3.3E-05</b>	<b>0.46</b>
Risk Drivers <sup>b,c</sup>	arsenic, 2.9E-05 benzo(a)pyrene, 1.6E-06	arsenic, 2.9E-05 benzo(a)pyrene, 2.6E-06	NA
<b>IRP Site 12 – Resident Child</b>			
Incidental dermal contact	5.2E-06	5.8E-06	0.33
Vapor inhalation	2.0E-10	2.0E-10	0.00027
Dust inhalation	2.9E-07	4.0E-07	0.31
Incidental ingestion	1.5E-05	1.5E-05	2.5
<b>Total</b>	<b>2.1E-05</b>	<b>2.2E-05</b>	<b>3.1</b>
Risk Drivers <sup>b,c</sup>	arsenic, 1.9E-05	arsenic, 1.9E-05 benzo(a)pyrene, 1.6E-06	antimony, 1.9
<b>IRP Site 12 – Industrial Worker</b>			
Incidental dermal contact	4.4E-06	5.4E-06	0.13
Vapor inhalation	8.9E-11	8.9E-11	0.00002
Dust inhalation	5.5E-08	9.5E-08	0.089
Incidental ingestion	8.9E-07	9.5E-07	0.1
<b>Total</b>	<b>5.3E-06</b>	<b>6.4E-06</b>	<b>0.33</b>
Risk Drivers <sup>b,c</sup>	arsenic, 3.6E-06 benzo(a)pyrene, 1.2E-06	arsenic, 3.6E-06 benzo(a)pyrene, 1.9E-06	NA
<b>IRP Site 12 – Construction Worker</b>			
Incidental dermal contact (soil)	3.8E-07	4.3E-07	0.15
Incidental dermal contact (groundwater)	7.8E-08	7.8E-08	0.049
Vapor inhalation	5.4E-11	5.4E-11	0.00045
Dust inhalation	1.5E-08	2.0E-08	0.093
Incidental ingestion	9.2E-07	9.4E-07	0.92
<b>Total</b>	<b>1.4E-06</b>	<b>1.5E-06</b>	<b>1.2</b>
Risk Drivers <sup>b,c</sup>	arsenic, 1.3E-06	arsenic, 1.3E-06	NA

(table continues)

## Section 7 Summary of Site Risks

Table 7-12 (continued)

## Notes:

- <sup>a</sup> risk was calculated using U.S. EPA or California Environmental Protection Agency toxicity values
- <sup>b</sup> cancer risk drivers are COPCs with cancer risk estimates of at least  $10^{-6}$  alone or in combination with other carcinogenic COPCs
- <sup>c</sup> hazard drivers are COPCs with hazard indices of at least 1 alone or in combination with other COPCs after a target organ analysis has been performed

## Acronyms/Abbreviations:

- COPC – chemical of potential concern
- IRP – Installation Restoration Program
- U.S. EPA – United States Environmental Protection Agency

For the construction worker, no COPC had an HI that exceeded 1; however, the total HI exceeded 1 when the HIs of antimony, arsenic, and manganese were summed. The systemic effects of two or more chemicals are additive only if the chemicals have the same mechanism of toxic action.

The total HI for the resident based on exposure of the child is 3.1. For the resident, antimony is a true hazard driver; its HI is 1.9. Arsenic, cadmium, aluminum, and manganese account for the balance. The sum of their HIs is 1.1, but none has an HI exceeding 1. Arsenic and manganese account for 77 percent of this sum; a target organ analysis that evaluated their mechanisms of toxic action indicates that it is unlikely their effects are additive. Without either one of them, the sum of the HIs (antimony excluded) would be less than 1. Therefore, the only hazard driver is antimony.

### 7.3 ECOLOGICAL RISK ASSESSMENT

The following subsections summarize the ERAs conducted at IRP Sites 7 and 12.

#### 7.3.1 Ecological Risk Assessment for IRP Site 7

A screening-level ERA and the first step of a baseline ERA were conducted as part of the RI to estimate the potential impacts of chemicals, primarily those reported in the site groundwater.

The screening-level ERA is Tier 1 of the DON policy for conducting ERAs (DON 1999, 2001). The Tier 1 screening-level ERA uses existing data and conservative assumptions regarding contaminant exposure to support risk management decisions. The DON policy is consistent with the U.S. EPA Ecological Risk Assessment Guidance for Superfund (U.S. EPA 1997) and with the California process (DTSC 1996a,b).

##### 7.3.1.1 CONCEPTUAL SITE MODEL

The conceptual site model is the last step in the problem formulation. It is based on the results of the site visit, the ecological site condition, the preliminary COPECs identification, and exposure pathways.

IRP Site 7 is completely paved and is characterized as a disturbed and barren habitat where vegetation is generally absent and wildlife may occur briefly (e.g., resting or passing through). IRP Site 7 offers little habitat value to wildlife. There are no ecological receptors applicable to IRP Site 7. Chemical concentrations reported in IRP Site 7 soil are not of an ecological concern because the site is paved and the paved surface interrupts potential exposure pathways between chemical compounds reported in soil and terrestrial organisms.

Several habitats exist within a 1-mile vicinity of IRP Site 7. Barren habitat surrounds the immediate vicinity of IRP Site 7 within the boundary of Naval Station San Diego. Beyond the Naval Station San Diego boundary, barren and urban habitats are present in the residential and commercial areas of the cities of San Diego and National City. Saline emergent wetland habitat exists at Paleta Creek approximately 2,400 feet to the south and at Chollas Creek approximately 2,400 feet to the north. Estuarine habitat is present in San Diego Bay approximately 800 feet west of the site.

The habitats described above that are in the vicinity of IRP Site 7 have potential ecological receptors. If IRP Site 7 COPECs have migrated to adjacent habitats (e.g., San Diego Bay), then potentially complete pathways may be present at these other habitats. Section 5 of the final RI Report includes tables with lists of San Diego area representative organisms occurring or potentially occurring in the urban, saline emergent wetland, and estuarine habitats. Tables in the RI Report also list special species that are classified as threatened, endangered, or of concern by state or federal agencies and are known or suspected to occur in the vicinity of Naval Station San Diego (BEI 2002a).

COPECs were assessed using maximum concentrations, which represented a conservative, worst case condition. COPECs in groundwater were identified using analytical data collected during the SI (IT 1992) and the RSE (BNI 1998c). Three groundwater samples were collected for the SI, and four samples were collected for the RSE. The COPECs include metals and VOCs.

Table 7-13 shows the maximum value of the seven sample results for each reported chemical compound along with the number of reported values and the frequency of detection. At the request of DTSC, additional groundwater samples were collected in 2003 from five wells installed in April and May 2003 for comparison to previous data. The new data are consistent with previous groundwater results (Table 5-6), and inclusion of the new data in Table 7-13 was unnecessary as it would not have changed the outcome of the ERA.

The exposure-pathway analysis identified incomplete pathways between terrestrial ecological receptors and site soil and groundwater. However, groundwater flow was noted to be a potential exposure pathway between off-site aquatic organisms and site groundwater. The off-site aquatic organisms may be exposed to chemical compounds by direct contact and by ingesting contaminated food items.



## Section 7 Summary of Site Risks

**Table 7-13**  
**Summary of Reported Chemicals in Groundwater\*, IRP Site 7**

Compound	Maximum Groundwater Concentration (µg/L)	Number of Reported Concentrations	Number of Samples Analyzed	Frequency of Detection (percent)
acetone	22	1	7	14
aluminum	1,880	4	4	100
antimony	64	3	7	43
arsenic	19.4	2	7	29
barium	111	7	7	100
beryllium	1.6	2	7	29
carbon tetrachloride	9	2	7	29
chloroform	11	1	7	14
chromium	6	1	7	14
iron	1,500	4	4	100
lead	1	1	3	33
manganese	244	4	4	100
mercury	0.27	2	7	29
molybdenum	22.8	2	3	67
nickel	13.3	1	7	14
selenium	14	2	7	29
silver	8.3	3	3	100
1,1,1-trichloroethane	3	1	7	14
vanadium	113	7	7	100
zinc	73.6	3	7	43

## Note:

- \* table does not include results from supplemental groundwater sampling conducted in 2003

## Acronyms/Abbreviations:

- IRP – Installation Restoration Program  
 µg/L – micrograms per liter

Aquatic life, such as fish and invertebrates, was evaluated as a category. Aquatic-dependent wildlife, such as birds and mammals, was evaluated with representative organisms. Fish and aquatic invertebrates are the food items of the birds and mammals potentially exposed to chemical compounds in the site groundwater. The harbor seal was modeled in this ERA to represent piscivorous (i.e., fish-eating) mammals in the bay. The California least tern and California brown pelican were used to represent piscivorous birds. Both the tern and pelican were used because they are both threatened or endangered species that are present in San Diego Bay. The western snowy plover, also a threatened or endangered species, was modeled to represent invertebrate-feeding birds.

Therefore, this screening-level ERA evaluated aquatic life (e.g., fish and invertebrates) and aquatic-dependent wildlife (e.g., birds and mammals), including threatened or endangered species.

### **7.3.1.2 ECOTOXICITY OF CHEMICALS OF POTENTIAL ECOLOGICAL CONCERN**

The COPECs reported in groundwater are known or suspected to cause various adverse responses in aquatic life and aquatic-dependent wildlife. Threshold values, concentrations in water that are not expected to cause adverse effects, are discussed in this section.

For this screening-level ERA, the preferred threshold value was a no observed adverse effects level (NOAEL) for chronic exposure. For aquatic-life ecological receptors, the saltwater chronic criteria for continuous exposure were selected as toxicity reference values (TRVs). For compounds without such criteria, TRVs equivalent to a NOAEL were selected from guidance documents as discussed in the final RI Report (BEI 2002a). Aquatic-life TRVs are listed in Table 7-14.

TRVs for aquatic-dependent wildlife have been summarized by the DON and U.S. EPA Region 9 Biological Technical Assistance Group (BTAG) (EPA-West 1998) and recommended by DTSC (2000a). For compounds without a specific DON-BTAG TRV, a TRV was selected from scientific literature.

Section 5 of the RI Report presents additional information regarding TRV determination. Aquatic-dependent wildlife TRVs are listed in Table 7-15 herein.

### **7.3.1.3 EXPOSURE ESTIMATE**

Exposure estimates for the Tier 1 screening-level ERA used conservative values for COPEC concentrations and for ecological-receptor exposure factors. Exposure estimates for both aquatic life and aquatic-dependent wildlife were developed from maximum reported groundwater concentrations for IRP Site 7 COPECs.

Exposure was estimated for aquatic life on the basis of direct exposure to the maximum groundwater concentration reported for each COPEC. These concentrations, reported from groundwater monitoring, were assumed to represent the concentrations in baywater at the point at which the groundwater makes contact with the bay. The procedures used to calculate the exposure estimate or dose for aquatic-dependent wildlife are presented in Section 5 of the final RI Report (BEI 2002a).

## Section 7 Summary of Site Risks

**Table 7-14**  
**Toxicity Reference Values for Aquatic Life, IRP Site 7**

Compound	TRV (µg/L)	Citation
aluminum	2.71	LT50 salmon 271 µg/L, Poleo and Muniz 1993 <sup>a</sup>
antimony	500	CCC proposed, U.S. EPA 1990 (55 Fed. Reg. 19986)
arsenic	36	CCC, U.S. EPA 2000b (CTR)
barium	5,000	LC50 opossum shrimp 500,000 µg/L, U.S. EPA 1978 <sup>a</sup>
beryllium	50	Mortality NOEC mummichog 5,000 µg/L (Eisler 1974) <sup>b</sup>
chromium	50	CCC, U.S. EPA 2000b (CTR)
iron	150	Median EC50 growth 15,000 µg/L <sup>b</sup>
lead	8.1	CCC, U.S. EPA 2000b (CTR)
manganese	2,500	No mortality effect sea star 25,000 µg/L, Watling 1983 <sup>b</sup>
mercury	0.94	CCC, U.S. EPA 1999b (NRAWQC)
molybdenum	650	Median EC50 growth 65,000 µg/L <sup>b</sup>
nickel	8.2	CCC, U.S. EPA 2000b (CTR)
selenium	71	CCC, U.S. EPA 2000b (CTR)
silver	1.9	CMC, U.S. EPA 2000b (CTR)
vanadium	205	Median EC50 growth 20,500 µg/L <sup>b</sup>
zinc	81	CCC, U.S. EPA 2000b (CTR)
acetone	21,000	LC50 brine shrimp 2,100,000 µg/L, Price et al. 1974 <sup>a</sup>
carbon tetrachloride	50,000	LOEC, U.S. EPA 1986 (Gold Book)
chloroform	180	LC50 trout 18,000 µg/L, Anderson and Lusty 1980 <sup>a</sup>
1,1,1-trichloroethane	31,200	LOEC, U.S. EPA 1986 (Gold Book)

## Notes:

<sup>a</sup> U.S. EPA 1999c<sup>b</sup> U.S. EPA 2002

## Acronyms/Abbreviations:

CCC – criteria continuous concentration

CMC – criteria maximum concentration

CTR – California Toxics Rule

EC50 – effective concentration for 50 percent of organisms

Fed. Reg. – *Federal Register*

IRP – Installation Restoration Program

LC50 – lethal concentration for 50 percent of organisms

LOEC – lowest-observed-effect concentration

LT50 – lethal threshold for 50 percent of organisms

µg/L – micrograms per liter

NOEC – no-observed-effect concentration

NRAWQC – National Recommended Ambient Water Quality Criteria

TRV – toxicity reference value

U.S. EPA – United States Environmental Protection Agency

**Table 7-15**  
**Toxicity Reference Values\* for Aquatic-Dependent Wildlife, IRP Site 7**  
**(milligrams per kilogram per day)**

Compound	Mammals	Birds	Harbor Seal	California Least Tern	California Brown Pelican	Western Snowy Plover
acetone	10	52	2.567	52	52	52
aluminum	1.93	109.7	0.268	109.7	109.7	109.7
antimony	0.066	0.0066	0.0169	0.0	0.0	0.0
arsenic	0.32	5.5	0.0811	5.5	5.5	5.5
barium	0.51	20.8	0.138	20.8	20.8	20.8
beryllium	0.66	0.066	0.169	0.066	0.066	0.066
carbon tetrachloride	16	1.6	4.108	1.6	1.6	1.6
chloroform	15	1.5	3.851	1.5	1.5	1.5
chromium	1.314	0.1314	0.337	0.1314	0.1314	0.1314
iron	NA	NA	NA	NA	NA	NA
lead	0.0015	0.014	0.000338	0.014	0.014	0.014
manganese	13.7	77.6	1.972	77.6	77.6	77.6
mercury	0.027	0.039	0.00852	0.039	0.039	0.039
molybdenum	0.26	3.5	0.0361	3.5	3.5	3.5
nickel	0.133	1.38	0.0313	1.38	1.38	1.38
selenium	0.05	0.23	0.0110	0.23	0.23	0.23
silver	0.375	178	0.0521	178	178	178
1,1,1-trichloroethane	1,000	100	144.4	100	100	100
vanadium	0.21	11.4	0.0501	11.4	11.4	11.4
zinc	9.6	17.2	1.281	17.2	17.2	17.2

Note:

\* DON-BTAG TRV: arsenic, lead, manganese, mercury, nickel, selenium, and zinc; see text for source of other TRV

Acronyms/Abbreviations:

BTAG – Biological Technical Assistance Group  
 DON – Department of the Navy  
 IRP – Installation Restoration Program  
 NA – not applicable  
 TRV – toxicity reference value

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Section 7 Summary of Site Risks

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**7.3.1.4 RISK ESTIMATION**

The risk for aquatic life and aquatic-dependent wildlife was estimated by an HQ. The HQ was obtained by dividing the exposure estimate by the TRV.

***Aquatic-Life Risk Estimation***

Table 7-16 lists the HQ for each COPEC for aquatic life. Most of the HQs were less than 1, indicating that those COPECs were unlikely to represent a potential ecological risk for aquatic life. Four compounds are identified in the table in boldface with HQs exceeding 1, indicating potential ecological risk: aluminum (HQ of 690), iron (HQ of 10), nickel (HQ of 1.6), and silver (HQ of 4.4). Therefore, the Tier 1 screening-level ERA suggested that an additional evaluation of the risk is warranted by first refining the exposure assessment (Refined Exposure Estimate for Aquatic Life section below) for the four compounds with an HQ in excess of 1.

***Aquatic-Dependent Wildlife Risk Estimation***

Table 7-17 lists the HQ for each COPEC for aquatic-dependent wildlife. The HQs that were less than 1, such as those for the organic compounds, indicated that those COPECs were unlikely to represent a potential ecological risk for aquatic-dependent wildlife. Several metal compounds had HQs exceeding 1, indicating potential ecological risk. Therefore, the Tier 1 screening-level ERA suggested that an additional evaluation of the risk is warranted by first refining the exposure assessment (Refined Exposure Estimate for Aquatic-Dependent Wildlife section below).

**7.3.1.5 REFINED EXPOSURE ESTIMATE**

A refined exposure estimate was prepared as Step 3a of the ERA (DON 1999, 2001) using readily available site-specific information for COPECs that were not eliminated during the Tier 1 screening-level ERA.

Exposure factors that may be included in the refined exposure estimate include exposure concentration, assimilation efficiency, bioavailability, and site-use factor (SUF). In addition, frequency of detection and comparison of exposure concentration to background concentration may be considered during the refined exposure estimate.

The refined exposure estimate presented here included a refinement of the exposure concentration for aquatic-life receptors based on groundwater model projections and a refinement of the SUFs for aquatic-dependent wildlife. Also, the exposure concentration was compared to the Naval Station San Diego background concentration.

***Refined Exposure Estimate for Aquatic Life***

In the initial screening risk estimate for aquatic life, the HQ for four of the metals reported in groundwater at IRP Site 7 exceeded 1. In such situations where the HQ exceeds 1, guidance allows for refinement of assumptions. The initial risk estimation

**Table 7-16**  
**Hazard Quotients for Aquatic Life, IRP Site 7**

Compound	Background Groundwater Concentration (µg/L)	Maximum Groundwater Concentration <sup>a</sup> (µg/L)	Aquatic Life IRV (µg/L)	Hazard Quotient
acetone	NA	22	21,000	1.0E-03
aluminum	NA	1,880	2.71	<b>6.9E+02<sup>b</sup></b>
antimony	65.61	64	500	1.3E-01
arsenic	18.92	19.4	36	5.4E-01
barium	NA	111	5,000	2.2E-02
beryllium	1.23	1.6	50	3.2E-02
carbon tetrachloride	NA	9	50,000	1.8E-04
chloroform	NA	11	180	6.1E-02
chromium	14.9	6	50	1.2E-01
iron	NA	1,500	150	<b>1.0E+01<sup>b</sup></b>
lead	6.14	1	8.1	1.2E-01
manganese	NA	244	2,500	9.8E-02
mercury	0.17	0.27	0.94	2.9E-01
molybdenum	125.3	22.8	650	3.5E-02
nickel	NA	13.3	8.2	<b>1.6E+00<sup>b</sup></b>
selenium	NA	14	71	2.0E-01
silver	8.97	8.3	1.9	<b>4.4E+00<sup>b</sup></b>
1,1,1-trichloroethane	NA	3	31,200	9.6E-05
vanadium	100	113	205	5.5E-01
zinc	NA	73.6	81	9.1E-01
<b>Hazard Index<sup>c</sup></b>	NA	NA	NA	7.1E+02

## Notes:

<sup>a</sup> table does not include results of 2003 supplemental groundwater sampling<sup>b</sup> boldface entries indicate hazard quotient greater than or equal to 1<sup>c</sup> sum of hazard quotients

## Acronyms/Abbreviations:

IRP – Installation Restoration Program

µg/L – micrograms per liter

NA – not applicable

TRV – toxicity reference value

Table 7-17  
Hazard Quotient Calculations for Aquatic-Dependent Wildlife  
Screening-Level Ecological Risk Assessment, IRP Site 7

Compound	DOSE <sup>a</sup>									TRV		HAZARD QUOTIENT <sup>b</sup>				
	Groundwater Maximum <sup>c</sup> (mg/L)	Water-Invert BCF (L/kg ww)	Invertebrate Concentration <sup>d</sup> (mg/kg ww)	Water-Fish BCF (L/kg ww)	Fish Concentration <sup>d</sup> (mg/kg ww)	Harbor Seal <sup>e</sup> (mg/kg-day)	California Least Tern <sup>c</sup> (mg/kg-day)	California Brown Pelican <sup>c</sup> (mg/kg-day)	Western Snowy Plover <sup>f</sup> (mg/kg-day)	Harbor Seal (mg/kg-day)	Avian (mg/kg-day)	Harbor Seal	California Least Tern	California Brown Pelican	Western Snowy Plover	Maximum
acetone	0.022	0.045	0.001	0.099	0.00218	1.52E-04	1.50E-03	3.31E-04	7.05E-04	2.567	52	5.94E-05	2.88E-05	6.36E-06	1.36E-05	5.94E-05
aluminum	1.88	4,066	7,644	2.7	5.076	3.55E-01	3.49E+00	7.71E-01	5.39E+03	0.268	109.7	1.33E+00 <sup>g</sup>	3.18E-02	7.03E-03	4.91E+01 <sup>g</sup>	4.91E+01 <sup>g</sup>
antimony	0.064	7	0.448	40	2.56	1.79E-01	1.76E+00	3.89E-01	3.16E-01	0.0169	0.0066	1.06E+01 <sup>g</sup>	2.67E+02 <sup>g</sup>	5.89E+01 <sup>g</sup>	4.79E+01 <sup>g</sup>	2.67E+02 <sup>g</sup>
arsenic	0.0194	73	1.416	114	2.2116	1.55E-01	1.52E+00	3.36E-01	9.98E-01	0.0811	5.5	1.91E+00 <sup>g</sup>	2.76E-01	6.11E-02	1.82E-01	1.91E+00 <sup>g</sup>
barium	0.111	200	22.2	633	70.263	4.92E+00	4.83E+01	1.07E+01	1.57E+01	0.138	20.8	3.56E+01 <sup>g</sup>	2.32E+00 <sup>g</sup>	5.13E-01	7.52E-01	3.56E+01 <sup>g</sup>
beryllium	0.0016	45	0.072	62	0.0992	6.94E-03	6.82E-02	1.51E-02	5.08E-02	0.169	0.066	4.10E-02	1.03E+00 <sup>g</sup>	2.28E-01	7.69E-01	1.03E+00 <sup>g</sup>
carbon tetrachloride	0.009	12.3	0.1107	30.0	0.27	1.89E-02	1.86E-01	4.10E-02	7.80E-02	4.108	1.6	4.60E-03	1.16E-01	2.56E-02	4.88E-02	1.16E-01
chloroform	0.011	2.67	0.02937	3.59	0.03949	2.76E-03	2.71E-02	6.00E-03	2.07E-02	3.851	1.5	7.18E-04	1.81E-02	4.00E-03	1.38E-02	1.81E-02
chromium	0.006	3,000	18	19	0.114	7.98E-03	7.83E-02	1.73E-02	1.27E+01	0.337	0.1314	2.37E-02	5.96E-01	1.32E-01	9.66E+01 <sup>g</sup>	9.66E+01 <sup>g</sup>
iron	1.5	4,066	6,099	633	949.5	6.65E+01	6.52E+02	1.44E+02	4.30E+03	NA	NA	NA	NA	NA	NA	NA
lead	0.001	5,059	5.059	0.09	0.00009	6.30E-06	6.18E-05	1.37E-05	3.57E+00	0.000338	0.014	1.86E-02	4.42E-03	9.76E-04	2.55E+02 <sup>g</sup>	2.55E+02 <sup>g</sup>
manganese	0.244	4,066	992.1	633	154.452	1.08E+01	1.06E+02	2.35E+01	6.99E+02	1.972	77.6	5.48E+00 <sup>g</sup>	1.37E+00 <sup>g</sup>	3.02E-01	9.01E+00 <sup>g</sup>	9.01E+00 <sup>g</sup>
mercury	0.00027	20,184	5.45	3,530	0.9531	6.67E-02	6.55E-01	1.45E-01	3.84E+00	0.00852	0.039	7.83E+00 <sup>g</sup>	1.68E+01 <sup>g</sup>	3.71E+00 <sup>g</sup>	9.85E+01 <sup>g</sup>	9.85E+01 <sup>g</sup>
molybdenum	0.0228	4,066	92.70	633	14.4324	1.01E+00	9.92E+00	2.19E+00	6.54E+01	0.0361	3.5	2.80E+01 <sup>g</sup>	2.83E+00 <sup>g</sup>	6.26E-01	1.87E+01 <sup>g</sup>	2.80E+01 <sup>g</sup>
nickel	0.0133	28	0.3724	78	1.0374	7.26E-02	7.13E-01	1.58E-01	2.63E-01	0.0313	1.38	2.32E+00 <sup>g</sup>	5.17E-01	1.14E-01	1.90E-01	2.32E+00 <sup>g</sup>
selenium	0.014	1,262	17.67	129	1.806	1.26E-01	1.24E+00	2.74E-01	1.25E+01	0.0110	0.23	1.15E+01 <sup>g</sup>	5.40E+00 <sup>g</sup>	1.19E+00 <sup>g</sup>	5.42E+01 <sup>g</sup>	5.42E+01 <sup>g</sup>
silver	0.0083	298	2.473	87.71	0.72799	5.10E-02	5.00E-01	1.11E-01	1.74E+00	0.0521	178	9.78E-01	2.81E-03	6.21E-04	9.80E-03	9.78E-01
1,1,1-trichloroethane	0.003	7.68	0.02303	29.6	0.08866	6.21E-03	6.09E-02	1.35E-02	1.62E-02	144.4	100	4.30E-05	6.09E-04	1.35E-04	1.62E-04	6.09E-04
vanadium	0.113	4,066	459.5	633	71.529	5.01E+00	4.91E+01	1.09E+01	3.24E+02	0.0501	11.4	1.00E+02 <sup>g</sup>	4.31E+00 <sup>g</sup>	9.53E-01	2.84E+01 <sup>g</sup>	1.00E+02 <sup>g</sup>
zinc	0.0736	4,578	336.9	2,059	151.5424	1.06E+01	1.04E+02	2.30E+01	2.38E+02	1.281	17.2	8.28E+00 <sup>g</sup>	6.05E+00 <sup>g</sup>	1.34E+00 <sup>g</sup>	1.38E+01 <sup>g</sup>	1.38E+01 <sup>g</sup>
Hazard Index												2.14E+02	3.08E+02	6.81E+01	6.73E+02	
Body weight (kg)						80.55	0.045	3.4	0.0418							
Ingestion (kg/day)						5.639	0.03092	0.5164	0.02947							

Notes:  
<sup>a</sup> (fish or invertebrate concentration) × (ingestion rate for receptor) / (body weight for receptor)  
<sup>b</sup> (dose for receptor) / (TRV for receptor)  
<sup>c</sup> table does not include data from 2003 supplemental groundwater sampling  
<sup>d</sup> (groundwater maximum) × BCF × (FCM = 1)  
<sup>e</sup> feeds on fish only  
<sup>f</sup> feeds on invertebrates only  
<sup>g</sup> boldface entries indicate hazard quotient values greater than 1

Acronyms/Abbreviations:  
BCF – bioconcentration factor  
FCM – food chain multiplier  
IRP – Installation Restoration Program  
kg – kilogram  
kg/day – kilograms per day  
L/kg ww – liters per kilogram wet-weight  
mg/kg-day – milligrams per kilogram per day  
mg/kg ww – milligrams per kilogram wet-weight  
mg/L – milligrams per liter  
NA – not applicable  
TRV – toxicity reference value

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Section 7 Summary of Site Risks

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used the maximum concentration reported for each COPEC as the exposure concentration. However, aquatic receptors will actually be exposed to COPEC concentrations in baywater at the point at which groundwater makes contact with San Diego Bay. The aquatic-life exposure estimate was refined on the basis of a groundwater model prediction of COPEC concentrations if site groundwater migrates to baywater as discussed below.

COPEC concentrations are also compared to groundwater background concentrations in the following discussion.

**Groundwater Modeling.** The regional groundwater flow gradient in the vicinity of IRP Site 7 indicates that metals reported in IRP Site 7 groundwater samples could potentially migrate toward and eventually discharge into San Diego Bay. It is at this point where receptors may come into contact with groundwater COPECs originating at IRP Site 7. The screening-level ERA indicated that four inorganics (aluminum, iron, nickel, and silver) have the potential to cause ecological harm to aquatic life if groundwater with the maximum concentration reported in samples from the site is discharged directly to the bay.

To refine exposure estimates used in the ERA, a groundwater model was used to estimate the concentrations of the four inorganic COPECs identified in the initial ecological screening with HIs greater than 1. The modeling effort was intended to project a range of concentrations at San Diego Bay through time for each of these four inorganic COPECs, assuming origination at IRP Site 7. Contribution to the concentration of the metal at the bay from the subsurface between the site and the bay was not included in the model.

The model conservatively assumed that no tidal mixing occurred at the interface between the discharge point and the bay. The model also conservatively assumed that the reported metal groundwater concentration was completely bioavailable and remained bioavailable as the groundwater traveled and became more saline as it neared and entered the bay environment. To conservatively refine the ecologic exposure estimates, the model also assumed a southwest groundwater flow directly (shortest distance) to San Diego Bay, a distance of approximately 800 feet.

The groundwater model AT123D (Yeh 1993) was used to estimate the concentration of each metal in the groundwater, assuming travel along the shortest distance to the bay. The simulation for IRP Site 7 assumed transport mechanisms of advection, sorption, and hydrodynamic dispersion. Molecular diffusion and decay were not considered. Site-specific groundwater properties were used as input into the model when available.

For the purpose of this model, the maximum concentration of each metal reported in primary samples from groundwater monitoring wells at IRP Site 7 was assumed to be uniformly distributed between the groundwater monitoring wells.

Although the source of the metals may not necessarily be linked directly to the former city of San Diego sewage treatment plant, the source for the model was assumed to be an instantaneous release of the mass of metal present in the groundwater (well field area [500 by 875 feet] by 15 feet thick) and the mass of metal that would be present in the soil



(well field area [500 by 875 feet] by 15 feet thick) at equilibrium with the groundwater. Information about the mass and a figure indicating the aerial extent of the source for each of the metals is included in Appendix H of the final RI Report (BEI 2002a).

The soil-water coefficient values used in the model were selected on the basis of pH ranges measured in the groundwater at IRP Site 7 and the soil type reported in lithologic logs at the site.

**Model Results.** Table 7-18 presents both the maximum groundwater concentration predicted at the bay within the next 2,000 years and the time predicted for groundwater concentrations equal to the TRVs to reach the bay. The groundwater model indicated that only silver and nickel would reach San Diego Bay at concentrations in excess of their TRVs within 2,000 years. The first discharge of iron to the bay will occur after 1,300 years, and iron concentrations will remain less than TRVs for the projected 2,000-year model run time. Aluminum will not reach the bay within the 2,000-year model projection. This indicated that, for all practical purposes, the pathway is not complete for aluminum in groundwater between the site and the bay.

In general, the model indicated that metals in groundwater are not mobile under conditions present at IRP Site 7. Typically, mobility of metals in groundwater increases as pH values decrease. Groundwater pH at IRP Site 7 has been measured in monitoring wells at values between 6.9 and 7.3. Over the pH range measured at IRP Site 7 and common in most groundwater, the dissolved concentration of metals is small and most metals will be associated with the solid phase. For instance, in groundwater at pH greater than 6, the solid species of iron (iron disulfide and ferric oxide) dominate with nearly all of the iron existing as a solid, making the element immobile (Domenico and Schwartz 1998).

**Refined Hazard Quotients for Aquatic Life.** The exposure of aquatic life to the four metals (aluminum, iron, nickel, and silver) was based on direct contact with the concentrations of these metals estimated using the model. These concentrations were used to represent concentrations in baywater to which aquatic life would be exposed. Because the bay is a saline environment and the discharge from IRP Site 7 (if any) is small, it is not likely that the concentration estimated for each metal at the point it enters the bay is actually the concentration to which aquatic animals would be exposed.

Table 7-19 presents information on the four metals and recalculates the HQs for aquatic life. Using the refined exposure concentrations, no single metal with a concentration above Naval Station San Diego background has an HQ above 1. HQs less than 1 generally indicate that adverse effects on assessment endpoints are unlikely, providing that indicators of toxicity have been measured in appropriate test species and that chemical concentrations have not been underestimated. A discussion of the uncertainty surrounding the HQs and HIs is presented in Section 5.6 of the final RI Report (BEI 2002a).

## Section 7 Summary of Site Risks

**Table 7-18**  
**Maximum Modeled Concentration and Time to Reach Bay at TRV Concentration, IRP Site 7**

	Aluminum	Iron	Nickel	Silver
IRV (µg/L)	2.71	150	8.2	1.9
Maximum estimated concentration at bay (µg/L) in next 2,000 years	0	0.000116 at 2,000 years and increasing	8.21 at 1,585 years	5.12 at 695 years
Years to bay (>IRV)	> 2,000	> 2,000	1,575	435

## Acronyms/Abbreviations:

IRP – Installation Restoration Program

µg/L – micrograms per liter

TRV – toxicity reference value

**Table 7-19**  
**Hazard Quotients for Aquatic Life Using Refined Exposure Estimate, IRP Site 7**

Metal	Background Groundwater Concentration (µg/L)	Refined Groundwater Concentration (µg/L)	Aquatic-Life TRV (µg/L)	HQ With Refined Concentration Greater Than Background Values	HQ
aluminum	NA	0	2.71	— <sup>a</sup>	—
iron	NA	$1.16 \times 10^{-4}$	150	$7.7 \times 10^{-7}$	$7.7 \times 10^{-7}$
nickel	NA	8.21	8.2	1.0	1.0
silver	8.97	5.12	1.9	—	2.7
<b>Hazard Index<sup>b</sup></b>				<b>1.00</b>	<b>3.7</b>

## Notes:

<sup>a</sup> dash indicates HQ cannot be calculated or refined concentration is less than background<sup>b</sup> sum of HQs

## Acronyms/Abbreviations:

COPEC – chemical of potential ecological concern

HQ – hazard quotient

IRP – Installation Restoration Program

µg/L – micrograms per liter

NA – not applicable

TRV – toxicity reference value

It is common to compare the concentration of inorganic constituents to background concentrations during the ERA process. Then, inorganic constituents having a concentration less than the background concentration are eliminated from an ERA.

Background studies have been conducted for Naval Station San Diego (BNI 1996a, 1998a). The one analyte (silver) identified in the refined risk estimate as having an HQ exceeding 1 was included in these background studies. The maximum silver concentration in IRP Site 7 groundwater (8.3 µg/L) is similar to the reference background value (8.97 µg/L), suggesting that silver should be eliminated from the ERA. However, silver was retained in the ERA because groundwater background values have not received concurrence from regulatory agencies for application across Naval Station San Diego. The regulatory agencies agreed to consider background groundwater concentrations for reference purposes on a site-by-site basis.

#### ***Refined Exposure Estimate for Aquatic-Dependent Wildlife***

In this step, receptor-specific SUFs were included in the dose calculation. SUF is estimated as the ratio of the site area to the home range of the ecological receptor. To estimate the area of IRP Site 7, which would be characterized by the groundwater COPEC maximum concentration, it was assumed that the groundwater from IRP Site 7 would contact the bay at an area having a length equal to the length of IRP Site 7 (1,250 feet). It was also assumed that the baywater would maintain a COPEC concentration equivalent to the groundwater maximum concentration for a distance of 10 feet from the point of groundwater contact. These assumptions indicate that the aquatic site area in which aquatic life and aquatic-dependent wildlife are exposed to the COPECs is 12,500 square feet (0.116 hectare [ha]). SUFs based on these assumptions ranged from  $1.64 \times 10^{-4}$  (0.116 ha/106.9 ha home range) for the western snowy plover to  $9.23 \times 10^{-7}$  (0.116 ha/125,664 ha home range) for the California brown pelican.

All wildlife HQs calculated with the SUF and refined exposure estimate were less than 1 (Table 7-20), indicating that, after consideration of a refined exposure estimate, the COPECs are unlikely to represent a potential ecological risk to aquatic-dependent wildlife.

#### **7.3.1.6 RISK CHARACTERIZATION**

The Tier 1 screening-level ERA (DON 1999, 2001) indicated that potential risk exists for aquatic life and aquatic-dependent wildlife. Inclusion of Navy Step 3a, "Refinement of Conservative Exposure Assumptions," indicates that the COPECs are unlikely to present ecological risk for aquatic life or aquatic-dependent wildlife. Uncertainties related to the risk assessment are strongly biased to overestimate rather than underestimate the risk.

#### ***Aquatic-Life Risk Characterization***

The Tier 1 screening-level ERA indicated that aluminum, iron, nickel, and silver present a potential ecological risk to aquatic life. The Tier 2 refined exposure estimate considered groundwater transport factors and reevaluated the EPCs that could be expected at the groundwater point of contact with the bay. The groundwater transport

**Table 7-20**  
**Hazard Quotient Calculations for Aquatic-Dependent Wildlife**  
**Screening-Level Risk Assessment With Refined Exposure Estimate, IRP Site 7**

Compound	Groundwater Maximum <sup>c</sup> (mg/L)	Water-Invert BCF (L/kg ww)	Invertebrate Concentration <sup>d</sup> (mg/kg ww)	Water-Fish BCF (L/kg ww)	Fish Concentration <sup>d</sup> (mg/kg ww)	DOSE <sup>a</sup>				TRV		HAZARD QUOTIENT <sup>b</sup>				
						Harbor Seal <sup>e</sup> (mg/kg-day)	California Least Tern <sup>e</sup> (mg/kg-day)	California Brown Pelican <sup>e</sup> (mg/kg-day)	Western Snowy Plover <sup>f</sup> (mg/kg-day)	Harbor Seal (mg/kg-day)	Avian (mg/kg-day)	Harbor Seal	California Least Tern	California Brown Pelican	Western Snowy Plover	Maximum
acetone	0.022	0.045	0.001	0.099	0.00218	2.25E-09	2.21E-08	3.05E-10	1.16E-07	2.567	52	8.77E-10	4.25E-10	5.87E-12	2.22E-09	2.22E-09
aluminum	1.88	4,066	7644	2.7	5.076	5.25E-06	5.15E-05	7.12E-07	8.84E-01	0.268	109.7	1.96E-05	4.70E-07	6.49E-09	8.06E-03	8.06E-03
antimony	0.064	7	0.448	40	2.56	2.65E-06	2.60E-05	3.59E-07	5.18E-05	0.0169	0.0066	1.56E-04	3.94E-03	5.44E-05	7.85E-03	7.85E-03
arsenic	0.0194	73	1.416	114	2.2116	2.29E-06	2.25E-05	3.10E-07	1.64E-04	0.0811	5.5	2.82E-05	4.08E-06	5.64E-08	2.98E-05	2.98E-05
barium	0.111	200	22.2	633	70.263	7.27E-05	7.13E-04	9.85E-06	2.57E-03	0.138	20.8	5.26E-04	3.43E-05	4.74E-07	1.23E-04	5.26E-04
beryllium	0.0016	45	0.072	62	0.0992	1.03E-07	1.01E-06	1.39E-08	8.33E-06	0.169	0.066	6.06E-07	1.53E-05	2.11E-07	1.26E-04	1.26E-04
carbon tetrachloride	0.009	12.3	0.1107	30.0	0.27	2.79E-07	2.74E-06	3.79E-08	1.28E-05	4.108	1.6	6.80E-08	1.71E-06	2.37E-08	8.00E-06	8.00E-06
chloroform	0.011	2.67	0.02937	3.59	0.03949	4.08E-08	4.01E-07	5.54E-09	3.40E-06	3.851	1.5	1.06E-08	2.67E-07	3.69E-09	2.27E-06	2.27E-06
chromium	0.006	3,000	18	19	0.114	1.18E-07	1.16E-06	1.60E-08	2.08E-03	0.337	0.1314	3.50E-07	8.81E-06	1.22E-07	1.58E-02	1.58E-02
iron	1.5	4,066	6,099	633	949.5	9.82E-04	9.64E-03	1.33E-04	7.06E-01	NA	NA	NA	NA	NA	NA	NA
lead	0.001	5,059	5.059	0.09	0.00009	9.31E-11	9.14E-10	1.26E-11	5.85E-04	0.000338	0.014	2.75E-07	6.53E-08	9.01E-10	4.18E-02	4.18E-02
manganese	0.244	4,066	992.1	633	154.452	1.60E-04	1.57E-03	2.17E-05	1.15E-01	1.972	77.6	8.10E-05	2.02E-05	2.79E-07	1.48E-03	1.48E-03
mercury	0.00027	20,184	5.45	3,530	0.9531	9.86E-07	9.68E-06	1.34E-07	6.30E-04	0.00852	0.039	1.16E-04	2.48E-04	3.43E-06	1.62E-02	1.62E-02
molybdenum	0.0228	4,066	92.70	633	14.4324	1.49E-05	1.47E-04	2.02E-06	1.07E-02	0.0361	3.5	4.13E-04	4.19E-05	5.78E-07	3.06E-03	3.06E-03
nickel	0.0133	28	0.3724	78	1.0374	1.07E-06	1.05E-05	1.45E-07	4.31E-05	0.0313	1.38	3.42E-05	7.63E-06	1.05E-07	3.12E-05	3.42E-05
selenium	0.014	1,262	17.67	129	1.806	1.87E-06	1.83E-05	2.53E-07	2.04E-03	0.0110	0.23	1.70E-04	7.97E-05	1.10E-06	8.89E-03	8.89E-03
silver	0.0083	298	2.473	87.71	0.72799	7.53E-07	7.39E-06	1.02E-07	2.86E-04	0.0521	178	1.45E-05	4.15E-08	5.73E-10	1.61E-06	1.45E-05
1,1,1-trichloroethane	0.003	7.68	0.02303	29.6	0.08866	9.17E-08	9.00E-07	1.24E-08	2.66E-06	144.4	100	6.35E-10	9.00E-09	1.24E-10	2.66E-08	2.66E-08
vanadium	0.113	4,066	459.5	633	71.529	7.40E-05	7.26E-04	1.00E-05	5.32E-02	0.0501	11.4	1.48E-03	6.37E-05	8.80E-07	4.66E-03	4.66E-03
zinc	0.0736	4,578	336.9	2,059	151.5424	1.57E-04	1.54E-03	2.12E-05	3.90E-02	1.281	17.2	1.22E-04	8.95E-05	1.24E-06	2.27E-03	2.27E-03
<b>Hazard Index</b>												3.16E-03	4.55E-03	6.29E-05	1.10E-01	
						Body weight (kg)	80.55	0.045	3.4	0.0418						
						Ingestion (kg/day)	5.639	0.03092	0.5164	0.02947						
						Home range (ha)	7,850	7,850	125,664	706.9						
						Site-use factor <sup>g</sup>	1.478E-05	1.478E-05	9.231E-07	1.641E-04						

**Notes:**

- <sup>a</sup> (fish or invertebrate concentration) × (ingestion rate for receptor) / (body weight for receptor)
- <sup>b</sup> (dose for receptor) / (TRV for receptor)
- <sup>c</sup> table does not include data from 2003 supplemental groundwater sampling
- <sup>d</sup> (groundwater maximum) × BCF × (FCM = 1)
- <sup>e</sup> feeds on fish only
- <sup>f</sup> feeds on invertebrates only
- <sup>g</sup> based on assumed site area of 0.116 ha

**Acronyms/Abbreviations:**

BCF – bioconcentration factor  
FCM – food chain multiplier  
ha – hectare  
IRP – Installation Restoration Program

kg – kilogram  
kg/day – kilograms per day  
L/kg ww – liters per kilogram wet-weight  
mg/kg-day – milligrams per kilogram per day

mg/kg ww – milligrams per kilogram wet-weight  
mg/L – milligrams per liter  
NA – not applicable  
TRV – toxicity reference value

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## Section 7 Summary of Site Risks

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model indicated that EPCs at the bay would be greatly reduced from the values reported in IRP Site 7 groundwater and less than or equal to the TRVs for aluminum, iron, and nickel.

The groundwater transport model indicates that groundwater entering the bay would have a concentration equal to the TRV for silver after 435 years. However, the maximum reported concentration of silver in the groundwater at the site is below the reference background concentration developed for Naval Station San Diego. The 95 percent UCL of the mean for all reported silver concentrations in groundwater across the station (calculated background) was determined to be 8.97 µg/L. The maximum silver concentration reported in IRP Site 7 groundwater was 8.35 µg/L, similar to the reference background groundwater value for silver.

The highest HQ reported in the Tier 1 screening-level ERA was for aluminum at 690. Aluminum is typically not considered an environmental contaminant and is rarely monitored in discharge monitoring programs. Water-quality criteria for aluminum have not been promulgated in the California Toxics Rule. As a point of reference, the drinking water MCL for aluminum (1,000 µg/L) is similar to groundwater concentrations at IRP Site 7 (median 1,255 µg/L). Additionally, the maximum and the median groundwater concentrations at IRP Site 7 are similar to state of Florida surface water quality criteria for aluminum (1,500 µg/L) in Class III, predominantly marine waters (recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife) (*Florida Administrative Code* tit. 62, ch. 62-302).

No further investigation for ecological risk for aquatic life is warranted.

### ***Aquatic-Dependent Wildlife Risk Characterization***

The Tier 1 screening-level ERA indicated that potential ecological risk from several metals exists for aquatic-dependent wildlife. The Tier 2 refined exposure estimate considered the SUF for each of the representative wildlife ecological receptors. After consideration of the refined exposure estimate, none of the COPECs indicated potential ecological risk.

### **7.3.2 Ecological Risk for IRP Site 12**

The ERA compared the highest reported concentrations of the COPCs in groundwater with concentrations (i.e., water quality criteria) determined to be protective of saltwater organisms and their predators (including humans) by U.S. EPA and Cal/EPA. The scope of the assessment classified it as a preliminary screening assessment for the following two reasons.

- Water quality criteria have not been established for all of the COPCs found in IRP Site 12 groundwater.
- Risk estimates were based on the highest reported concentrations of the COPCs in groundwater rather than on concentrations at the point of contact (i.e., San Diego Bay).

Table 7-21 contains a list of the groundwater COPCs, their highest reported concentrations, and their ambient water quality criteria. The water quality criteria consist of 1) criteria for the protection of saltwater organisms, 2) criteria for the protection of saltwater organisms and their nonhuman predators, and 3) criteria for the protection of humans who consume fish and/or shellfish. The criteria developed by U.S. EPA under the Clean Water Act (CWA) Section 304(a)(1) for the protection of aquatic organisms (fresh- and saltwater) are also meant to be protective of human consumers, according to Appendix B of Quality Criteria for Water 1986 (U.S. EPA 1986). The final residue value used in the derivation of the criteria is the factor that protects consumers. In the Bays and Estuaries Plan, the criteria identified as protective of saltwater organisms are identical or almost identical to the criteria developed by U.S. EPA (SWRCB 1993). Therefore, the former can be assumed to be protective of nonhuman predators. The Ocean Plan criteria for protection of saltwater organisms are lower than the criteria in the two other sets, so they should also be protective of predators (SWRCB 1990).

The highest reported concentrations of arsenic, lead, nickel, and selenium exceeded at least one of the criteria for aquatic-life protection. Acute criteria were not exceeded. Only arsenic and thallium had concentrations that exceeded human-health criteria.

This screening assessment can be considered only preliminary because the lack of criteria made it impossible to assess the potential impacts of all the COPCs for San Diego Bay organisms and their predators. Seven of the COPCs did not have aquatic-life criteria. Only five of the COPCs had human-health criteria.

### **7.3.2.1 ASSESSMENT RESULTS**

The results of the assessment suggest that 1) arsenic, lead, and nickel may adversely affect aquatic organisms that inhabit baywaters near IRP Site 12 and the nonhuman organisms (e.g., birds and otters) that prey on them and 2) arsenic and thallium may adversely affect people who catch and eat fish or shellfish from baywaters near IRP Site 12. However, as discussed in Section 5, concentrations of metals reported in groundwater at IRP Site 12 may be naturally occurring.

### **7.3.2.2 ECOLOGICAL UNCERTAINTIES AT IRP SITE 12**

With respect to the ERA for IRP Site 12, the potential risk to marine organisms posed by COPCs in groundwater was estimated by comparing the highest reported concentrations of the COPCs with water quality criteria established to protect saltwater organisms and their predators, including humans, from the toxic effects of the COPCs. There are two problems with this approach. First, criteria were not available for all of the COPCs. Second, the criteria may not be applicable to the kinds of organisms that inhabit San Diego Bay.

Of the 13 COPCs, 7 could not be evaluated for possible ecological impacts because there were no water quality criteria, and 5 could not be evaluated for possible impacts on human fish consumers for the same reason. The concentrations of the unevaluated COPCs may or may not be toxic to organisms inhabiting the bay and their predators. The

Table 7-21  
Chemicals of Potential Concern in Groundwater, IRP Site 12  
(concentrations reported in milligrams per liter)

Chemical of Potential Concern	Highest Reported Concentration	CALIFORNIA BAYS AND ESTUARIES PLAN <sup>a</sup>				CALIFORNIA OCEAN PLAN <sup>b</sup>				CFR 304(a)(1) <sup>c</sup>			
		Aquatic Organisms and Nonhuman Predators		Human Fish Consumers		Aquatic Organisms and Nonhuman Predators		Human Fish Consumers		Aquatic Organisms and Nonhuman Predators		Human Fish Consumers	
		Acute <sup>d</sup>	1-Day Average	Chronic <sup>e</sup>	30-Day Average	Acute <sup>f</sup>	1-Day Average	Chronic <sup>g</sup>	30-Day Average	Acute <sup>d</sup>	1-Day Average	Chronic <sup>e</sup>	Not Specified
aluminum	2.3	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
arsenic	0.016	0.069	NE	0.036	NE	0.08	0.032	<b>0.008<sup>h</sup></b>	NE	0.069	NE	0.036	<b>0.00014<sup>b</sup></b>
barium	0.25	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	1
benzene	0.011	NE	NE	NE	NE	NE	NE	NE	0.059	NE	NE	NE	NE
cobalt	0.003	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
diethyl phthalate	0.016	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
lead	0.017	0.14	NE	<b>0.0056<sup>h</sup></b>	NE	0.020	<b>0.008<sup>h</sup></b>	<b>0.002<sup>h</sup></b>	NE	0.21	NE	<b>0.0081<sup>h</sup></b>	NE
manganese	1.9	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
nickel	0.033	NE	NE	<b>0.0083<sup>h</sup></b>	4.6	0.50	<b>0.020<sup>h</sup></b>	<b>0.005<sup>h</sup></b>	NE	NE	NE	<b>0.0082<sup>h</sup></b>	4.6
selenium	0.044	NE	0.3	0.071	NE	0.15	0.060	<b>0.015<sup>h</sup></b>	NE	0.074	NE	NE	NE
thallium	0.002	NE	NE	NE	<b>0.0018<sup>h</sup></b>	0.20	0.080	0.020	0.014	0.29	NE	0.071	0.0063
vanadium	0.02	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
zinc	0.012	NE	0.095	0.086	NE	NE	NE	NE	NE	0.09	NE	0.081	NE

Notes:

- <sup>a</sup> SWRCB 1993
- <sup>b</sup> SWRCB 1990
- <sup>c</sup> U.S. EPA 1986
- <sup>d</sup> 1-hour average
- <sup>e</sup> 4-day average
- <sup>f</sup> instantaneous maximum
- <sup>g</sup> 6-month average
- <sup>h</sup> **boldface** type identifies exceeded criteria

Acronyms/Abbreviations:

- CFR – Code of Federal Regulations
- IRP – Installation Restoration Program
- NE – not established

ambient water quality criteria developed under the CWA for the protection of saltwater organisms were based primarily on organisms along the East Coast of the United States. The sensitivity of organisms inhabiting San Diego Bay may be different from East Coast organisms, even those of the same species, because of differences in water temperature and chemistry. Nevertheless, most of the criteria in the California Bays and Estuaries Plan are identical to the criteria developed under the federal CWA.

## **7.4 BASIS FOR RISK-MANAGEMENT DECISIONS**

The following sections present the basis for the risk-management decisions at IRP Sites 7 and 12. The goal of the remedial process is to identify and remediate sites that pose a threat to human health and the environment. Risk managers integrated a variety of information (e.g., risks, uncertainty, and stakeholder's concerns) to determine if IRP Sites 7 and 12 required remediation or were no further action sites. The generally acceptable risk range (i.e.,  $10^{-6}$  to  $10^{-4}$ ) stated in the NCP is the risk range that should be carefully evaluated for remediation, partly depending on the frequency and duration of exposure, the population potentially exposed, weight of evidence of carcinogenicity feasibility, and cost of remediation.

### **7.4.1 IRP Site 7**

During the RI, cancer and noncancer risks were estimated for the residential scenario and ecological risks were estimated for aquatic receptors. The total residential cancer risks are within the range of  $10^{-6}$  to  $10^{-4}$ , and the HI is less than 1. For ecological risk, the Tier 2 refined exposure estimate indicated that only silver had an HQ greater than 1 for aquatic life; however, all reported silver concentrations in groundwater samples from IRP Site 7 were below Naval Station San Diego reference background values, indicating that additional investigation related to potential ecological risk is not warranted.

The following were also considered during the risk-management decision process: background level of contaminants, ability to monitor and control movement of contaminants, reliability of exposure data, and distribution of contaminants.

#### **7.4.1.1 BACKGROUND LEVEL OF CONTAMINANTS**

The largest contributors to cancer risk at IRP Site 7 were PAHs, specifically benzo(a)pyrene, and Aroclor 1254. Although a Naval Station San Diego background study for PAHs has not been performed, the Agency for Toxic Substances and Disease Registry lists background concentrations for many PAHs in rural, agricultural, and urban soil (ATSDR 1995). The EPCs used for individual PAH compounds in the risk assessment for IRP Site 7 fall into or well below the range of background concentrations present in urban soil. The only COPEC with a refined HQ greater than 1 for aquatic or aquatic-dependent wildlife was silver. All concentrations of silver reported in groundwater samples from IRP Site 7 were below the Naval Station San Diego reference background concentration of 8.97  $\mu\text{g/L}$ . The Naval Station San Diego background values



## Section 7 Summary of Site Risks

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developed for groundwater are used for reference purposes only and are not used to eliminate chemicals from risk assessments.

### 7.4.1.2 ABILITY TO MONITOR AND CONTROL MOVEMENT OF CONTAMINANTS

Another factor considered during the no action decision process for IRP Site 7 was that the risk drivers, PAHs and PCBs, are relatively insoluble and do not have a tendency to migrate off-site or to groundwater. As discussed in the fate and transport evaluation in Section 3 of the RI Report for IRP Site 7 (BEI 2002a), as a chemical group, both PAHs and PCBs have low water solubility and high affinity for sorption to organic matter. These are characteristics that limit the potential for leaching through soil as a transport process and cause the chemicals to be relatively immobile. This was demonstrated on a site-specific basis during the three additional groundwater sampling events for IRP Site 7 in 2003, where PCBs were not reported in any of the wells.

### 7.4.1.3 RELIABILITY OF EXPOSURE DATA

The reliability of exposure data was also considered during the NFA decision process for IRP Site 7. As discussed in the fate and transport evaluation in Section 3 of the RI Report for IRP Site 7, biodegradation is the most important transformation process affecting the persistence of PAHs in shallow soil. Another potential transformation process, photolysis, is limited to areas where surface soils are exposed to sunlight. The chemical concentrations used in the risk assessment were assumed to remain constant for the entire exposure duration. In order for exposure to risk drivers (relatively nonvolatile compounds) in the soil to occur, receptors would have to come in contact with impacted soil. This would occur only if the asphalt covering the site is removed and the site use changes. It is highly unlikely that the organic concentrations will remain constant, particularly in exposed soil. Benzo(a)pyrene, the risk driver, is biodegradable. Under the aerobic conditions that would occur in the surface soils if the pavement were removed, the half-life of this PAH is estimated to be 1.45 years, with 0.16 year possible under ideal conditions (Howard et al. 1991). In summary, it is likely that the risks due to PAHs are overstated because actual risks are a factor of chemical persistence over the exposure period.

Another area of uncertainty in exposure assessments is the prediction of human activities that lead to contact with environmental media and exposure to chemicals. A residential exposure setting was used to evaluate the COPCs at IRP Site 7. A residential risk assessment assumes that an adult is exposed to chemicals present at the site 24 hours a day, 350 days a year for 30 years. In reality, exposure times at IRP Site 7 are likely to be much less, especially because it is highly improbable that this residential setting will actually materialize.

IRP Site 7 is currently a paved parking lot at an active naval facility, and additional parking for Navy shipboard personnel must be found at Naval Station San Diego; therefore, land use at IRP Site 7 will likely not change. Redevelopment of the site to public residential use will not occur while the facility is under the DON's control. The

contaminants in the soil under the asphalt pavement do not pose a risk to current receptors because no viable exposure pathway exists. The residential setting is, therefore, hypothetical and overestimates the risks associated with current use.

Data evaluation involves using statistics to summarize the data, comparing summary data to background concentrations, and selecting COPCs. For some of the soil COPCs, a low frequency of detection rendered the use of the statistically derived 95 percent UCL as inapplicable, and the maximum detected chemical value was used as the appropriate estimator for the EPC. The assumption of long-term contact with the maximum concentration is conservative, and the use of the maximum concentrations in the risk assessment results in overestimates of exposures and risks.

#### **7.4.1.4 DISTRIBUTION OF CONTAMINANTS**

A final factor considered during the no action decision process for IRP Site 7 was whether the concentration of contaminants at one or more sample locations was significantly elevated over remaining concentrations (possibly representing a hot spot). Hot spots of PAHs were not suggested by the distribution and concentrations of contaminants presented in the RI Report for IRP Site 7. Benzo(a)pyrene was the only PAH reported in soil at IRP Site 7 at concentrations in excess of its 2000 residential PRG. The maximum concentration of this PAH was 620 µg/kg, reported in a soil sample collected from 9 to 10 feet bgs. Residential contact with this PAH is unlikely unless excavation is conducted at the site.

### **7.4.2 IRP Site 12**

During the ESI, cancer and noncancer risks were estimated for the residential, industrial, and construction scenarios and ecological risks were estimated by comparing the highest reported concentrations of COPCs in groundwater with concentrations determined to be protective of saltwater organisms and their predators (including humans). The total cancer risks were within the generally acceptable risk range of  $10^{-6}$  to  $10^{-4}$ , and the HI was above 1 for the child resident and construction worker. The primary contributor to the total cancer risk was arsenic. Arsenic was also one of the primary contributors to the HI. The reported concentrations of arsenic in soils at IRP Site 12 are likely to be naturally occurring and not the result of previous site activities.

The ERA suggested that arsenic, lead, and nickel may adversely affect aquatic organisms that inhabit the bay waters near IRP Site 12 and the nonhuman organisms that prey on them. Arsenic may also adversely affect people who catch and eat fish or shellfish from baywaters near IRP Site 12. However, concentrations of metals reported in groundwater at IRP Site 12 appear to be naturally occurring and not a result of previous site activities.

The following were considered during the no action risk-management decision process: removal of PAH-contaminated soil, background level of arsenic in soil, and reliability of exposure data. Unrestricted closure with no further action has been accepted by regulatory agencies (Attachment A).

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Section 7 Summary of Site Risks

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**7.4.2.1 REMOVAL OF PAH-CONTAMINATED SOIL**

The removal action performed at IRP Site 12 in 1996 removed approximately 2,828 cubic yards (5,090 tons) of PAH-impacted soil from an average of 4 feet bgs to a maximum of 9.5 feet bgs from two areas (Areas 1 and 2) of IRP Site 12. Samples were collected, and the excavation was extended laterally or vertically until confirmation sample results indicated that PAH concentrations were below residential PRGs. This removal reduced the total soil risk associated with Areas 1 and 2 from  $3.2 \times 10^{-3}$  (BNI 1996b) to  $1.2 \times 10^{-6}$  (OHM 1997).

**7.4.2.2 BACKGROUND LEVEL OF ARSENIC IN SOIL**

The risk assessment conducted as part of the ESI indicated that arsenic is the greatest contributor to cancer risk (using both U.S. EPA and Cal/EPA toxicity factors for the residential scenario), contributing approximately 89 percent to the total cancer risk. Arsenic was also identified as one of the primary contributors to noncancer risk. Arsenic is a naturally occurring metal with a Naval Station San Diego background value of 9.05 mg/kg. The EPC calculated for arsenic at IRP Site 12 is 8.79 mg/kg, which is less than the background value; therefore, the incremental risk from arsenic is nonexistent. All of the calculated cancer risk under industrial conditions from arsenic is attributable to background concentrations. The total cancer risk from arsenic using the IRP Site 12 EPC is  $2.9 \times 10^{-5}$  and reflects natural, background conditions.

**7.4.2.3 RELIABILITY OF EXPOSURE DATA**

As with IRP Site 7, the reliability of the exposure estimates was considered in the risk-management decision for IRP Site 12. Factors considered included biodegradation of benzo(a)pyrene, the second highest contributor to cancer risk at IRP Site 12; prediction of human activities that lead to contact with environmental media and exposure to chemicals; and use of the maximum concentration for chemicals with a low detection frequency.

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**Section 8****DESCRIPTION OF NO ACTION ALTERNATIVE**

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Studies conducted and information collected to date indicate that IRP Sites 5 and 11 do not contain hazardous materials. The baseline HHRA and ERA results for IRP Sites 7 and 12 indicate that these sites do not pose an unacceptable risk to human health or the environment. Accordingly, no remedial action is appropriate for these IRP sites. Under the no action alternative, monitoring, periodic reviews, such as five-year reviews, and deed restrictions (including deed notification) are not required. DTSC and RWQCB agree with this determination for IRP Sites 5, 7, 11, and 12. The DON's selection of no action for these sites reflects the determination that the overall condition of the sites is protective of human health and the environment. This no action RAP/ROD constitutes site closeout in the Defense Environmental Restoration Program.

CERCLA Section 121(d) states that remedial actions at CERCLA sites must, upon completion, attain any federal (or state if more stringent) environmental standards, requirements, criteria, or limitations that are determined to be ARARs. However, ARARs do not apply unless remedial action is being taken at a site. Therefore, ARARs are not applicable to the no action sites addressed in this RAP/ROD.

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## **Section 9**

# **DOCUMENTATION OF SIGNIFICANT CHANGES**

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The Proposed Plan for IRP Sites 5, 7, 11, and 12 was released for public comment in September 2002. It identified no action as the appropriate response for these sites. The DON reviewed all written and verbal comments submitted during the comment period. Upon review of these comments, it was determined that no significant change to the response, as it was originally identified in the Proposed Plan, was necessary.

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## Section 10

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## **RESPONSIVENESS SUMMARY**





## **RESPONSIVENESS SUMMARY**

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No significant comments have been received from the public regarding IRP Sites 5, 7, 11, and 12. However, one comment was submitted to the court reporter at the public meeting by the DTSC project manager for Naval Station San Diego. The comment addressed groundwater characterization at IRP Site 7 and public participation efforts and is reproduced in its entirety along with a summary of activities conducted in response.

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**RESPONSES TO COMMENTS SUBMITTED TO COURT  
REPORTER DURING PUBLIC MEETING**



<b>RESPONSIVENESS SUMMARY</b> <b>NAVAL STATION SAN DIEGO – SAN DIEGO, CALIFORNIA</b> <b>PROPOSED PLAN/DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION FOR IRP SITES 5, 7, 11 and 12</b>		
<b>Comments Received During Public Meeting Held on 18 September 2002</b>		
<b>Comments by: Doug Bautista, DTSC Project Manager</b>		
Number	Comments	Responses
1	<p>My name is Doug Bautista. I'm with the Department of Toxic Substances Control in Cypress, California. I am the designated project manager for Naval Station.</p> <p>My statement is the Department of Toxic Substances Control has not concurred on the Navy's proposed plan for no further action on Site 7. The Navy issued the proposed plan without providing the Department of Toxic Substances Control sufficient opportunity to review, comment and concur with the release of this proposed plan. There were technical issues raised during the remedial investigation that have not been resolved regarding human health and ecological risk at the site.</p> <p>The Department of Toxic Substances Control's main concern is there is not enough groundwater data to demonstrate that the site has not impacted groundwater or is not posing human and ecological risk.</p> <p>The Naval Station's basis for no further action is from a single sampling event of three wells in 1992 and another sampling event at four separate and distinct wells in 1998. The standard procedure is to install monitoring wells in proper locations around the site and sample those wells once every three months for at least one year.</p> <p>The agencies were also not provided the opportunity to verify, prior to the public release, that the public notification and participation efforts complied with the applicable state law. To ensure early and meaningful public participation opportunities, the Department of Toxic Substances Control routinely ensures outreach documents are released at or before the start of a public comments period. This proposed plan was mailed ten days after the comment period started and five days short of the community meeting, thereby reducing available time for the public review and participation.</p>	<p><b>Response:</b> The Navy values the Department of Toxic Substances Control's (DTSC) partnership and participation in the Installation Restoration Program (IRP) process at Naval Station San Diego. We appreciate your concern regarding public notification and agency involvement related to the Proposed Plan for IRP Sites 5, 7, 11 and 12.</p> <p>The draft Proposed Plan was transmitted to Mr. Douglas Bautista of DTSC on 15 August 2002, allowing for the full 10-day review cited in A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents (U.S. EPA 1999). Per National Oil and Hazardous Substances Pollution Contingency Plan (NCP) Section 300.515(h)(3), in the absence of a Superfund Memorandum of Agreement (SMOA), the support agency has a minimum of 5 working days and a maximum of 10 working days to comment on the Proposed Plan. While the Navy would have preferred to have had technical issues resolved prior to issuing the Proposed Plan, resolution is not required prior to issuance of the Proposed Plan by the lead agency. DTSC's concurrence was not cited for IRP Site 7 in the Proposed Plan recognizing the remaining technical issues.</p> <p>In accordance with EPA guidance, the Public Notice citing the availability of the Proposed Plan and the public meeting was issued on 29 August 2002, 20 days in advance of the public meeting. The public comment period for the Proposed Plan extended to 17 October 2002, allowing over 2 weeks additional time beyond the typical 30-day public comment period suggested by U.S. EPA. The Navy's intent was to go beyond the letter of EPA's guidance in an effort to involve and inform the public in this matter as further discussed in the attached letter from the DON to DTSC dated 14 January 2003.</p>

## Responses to Comments Received During Public Comment Period

	<p>On September 16, 2002 the Department of Toxic Substances Control sent a letter to the commanding officer of Naval Station San Diego requesting that Naval Station remove the proposed no further action designation from Site 7 until such time that it is determined by federal and state regulatory agencies that contamination in groundwater does not pose a threat to human health and aquatic environments.</p>	<p>Although the Navy maintains that both soil and groundwater at IRP Site 7 are adequately characterized to assure protection of public health and the environment, in an effort to address DTSC's concerns about groundwater quality at IRP Site 7 expressed in this comment as well as those outlined in the 16 September 2002 letter from DTSC to the Navy, the Navy conducted additional groundwater investigation at IRP Site 7. A supplemental investigation, which included installation of five additional groundwater monitoring wells, collection of soil samples from the boreholes, and collection of three additional rounds of groundwater samples, was performed at IRP Site 7 in 2003. The wells were installed at the locations suggested by DTSC geologists in their 23 October 2002 letter and groundwater sampling was conducted as agreed upon in the technical advisory meeting on 27 February 2003. Additionally, a DTSC geologist was present at the site during well installation and participated in soil sample collection. As noted in Section 5 of the RAP/ROD, the DTSC geologist and other field personnel noted the presence of sewage sludge in some subsurface soils during the investigation. The results of this supplemental investigation have been included in the administrative record and are presented in the RAP/ROD.</p>
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DEPARTMENT OF THE NAVY

COMMANDING OFFICER  
NAVAL BASE SAN DIEGO  
3455 SENN RD  
SAN DIEGO, CALIFORNIA 92138-5084

IN REPLY REFER TO:  
5090

Ser N46MS/ 0048

JAN 1 2003

Mr. John Scandura, Branch Chief  
Federal Facilities Unit "B"  
Office of Military Facilities  
California Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, CA 90630

Dear Mr. Scandura:

Subj: RESPONSE TO DEPARTMENT OF TOXIC SUBSTANCES CONTROL LETTER OF  
SEPTEMBER 16, 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP  
SITE 7 AT NAVAL STATION SAN DIEGO

Thank you for your letter of September 16, 2002. The Navy values the Department of Toxic Substances Control's (DTSC) partnership and participation in the Installation Restoration Program (IRP) process at Naval Station San Diego. I appreciate your concern regarding public notification and agency involvement related to the Proposed Plan for IRP Sites 5, 7, 11 and 12, and will attempt to address that concern with this letter.

The Draft Proposed Plan was transmitted to Mr. Douglas Bautista of DTSC on August 15, 2002, allowing for the full 10-day review cited in *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (U.S. Environmental Protection Agency 1999). Per NCP Section 300.515(h)(3), in the absence of a SMOA, the support agency has a minimum of 5 working days and a maximum of 10 working days to comment on the Proposed Plan.

The Navy recognizes DTSC had unresolved concerns regarding the proposal for no further action at IRP Site 7 when the Proposed Plan was issued. The Project Team has been working toward resolution of these issues for the past twelve months. While the Navy would have preferred to have had these issues resolved prior to issuing the Proposed Plan, resolution is not required prior to issuance of the Proposed Plan by the lead agency. The Proposed Plan issued in September 2002, documents the Navy's lead agency decision for no further action at IRP Sites 5, 7, 11 and 12, and cites agency concurrence with this proposed remedy for IRP Sites 5, 11 and 12. Agency concurrence was not cited for IRP Site 7, recognizing the remaining issues. Given the Regional Water Quality Control Board's (RWQCB) concurrence with the lead agency recommendation for no further action at IRP Site 7, the Navy strongly desires to resolve DTSC's remaining groundwater concerns at this site, as discussed above. As noted, and in accordance with EPA guidance, the Public Notice citing the availability of the Proposed Plan and the public meeting was issued on August 29, 2002, 20-days in advance of the public meeting. The public

comment period for the Proposed Plan extended to October 17, 2002, allowing over two weeks additional time beyond the typical 30-day public comment period suggested by U.S. EPA.

The Navy's intent was to go beyond the letter of EPA's guidance in an effort to involve and inform the public in this matter. The Proposed Plan was printed in The Star News, a free weekly paper widely available in South Bay neighborhoods, on August 30, 2002. The publication of the proposed plan, in its entirety, in a local newspaper, was another measure taken toward full and open public participation. The public notice was published in two newspapers: the English version in the San Diego Union Tribune (August 29 and 31, 2002), and the Spanish version in El Mexicana (August 31, 2002). In addition, the public notice was mailed to the full community mailing list in both Spanish and English. Although not required, copies of the full text of the Proposed Plan in both Spanish and English were mailed to the full community mailing list. The Navy delayed mailing the Proposed Plan until September 13, 2002 anticipating resolution of outstanding agency issues.

The Navy takes issue with your statement that groundwater underlying IRP Site 7 has not been adequately characterized. During the Remedial Site Evaluation, DTSC raised no concerns regarding groundwater characterization. In fact, DTSC agreed with the Navy during the Remedial Investigation Work Plan review that groundwater underlying the site was not an issue and additional groundwater sampling was not warranted. My staff will discuss our agencies' consensus and agreements in more detail in a separate letter. This letter will also address your agency's October 23, 2002, letter and propose a compromise to our current impasse regarding groundwater characterization.

As lead agency, the Navy shares DTSC's interest in proceeding with the timely characterization and cleanup of Naval Station San Diego's remaining IRP Sites, and encourages constructive participation with our regulatory agency partners.

I look forward working together toward the timely resolution of any remaining issues.

Sincerely,



D. B. KEMP  
Captain, U.S. Navy  
Commanding Officer

Copy to:  
Stan Phillippe, Chief Office of Military Facilities  
Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, California 95826-3268



Karen Baker  
Branch Chief  
Geology & Correction  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Nennet Alvarez  
Branch Chief  
Statewide Compliance Division  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Jim Marxen  
Acting Deputy Director  
Office of External Affairs  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

Rick Moss  
Branch Chief  
Hazardous Waste Management  
Office of External Affairs  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

John Robertus, Executive Officer  
California Regional Water Quality Control Board  
San Diego Region  
Site Mitigation and Cleanup Unit  
John Robertus, Executive Officer  
9174 Sky Park Court, Suite 100  
San Diego, California 92133-4340

John P. Anderson, Senior Engineering Geologist  
California Regional Water Quality Control Board  
San Diego Region Site Mitigation and Cleanup Unit  
9174 Sky Park Court, Suite 100  
San Diego, California 92133-4340

Jose Kou  
Branch Chief  
Southern California Permitting Branch  
Department of Toxic Substances Control  
1011 North Grandview Avenue  
Glendale, California 91201

Southwest Division  
Naval Facilities Engineering Command  
Code 5SEN DB (Attn: Mr. Darren Belton)  
2585 Callagan Hwy, Building 99  
San Diego, California 92136-5198

Commander, Navy Region Southwest  
Assistant Chief of Staff for Environmental  
Code 4512 (Attn: Ms. Theresa Morley)  
33000 Nixie Way  
Building 50, Suite 326  
San Diego, California 92146-5110



DEPARTMENT OF THE NAVY  
SOUTH BAY AREA FOCUS TEAM  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
2585 CALLAGAN HWY, BLDG 99  
SAN DIEGO CALIFORNIA 92136-5198

5090.3(a)  
5SEN.DB/012  
January 16, 2003

Mr. John Scandura, Branch Chief  
Federal Facilities Unit "B"  
Office of Military Facilities  
California Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, CA 90630-4732

Subj: RESPONSE TO DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)  
LETTER OF OCTOBER 23, 2002, REGARDING THE NAVY'S PROPOSED  
PLAN FOR IRP SITE 7 AT NAVAL STATION SAN DIEGO

Dear Mr. Scandura:

Thank you for your letter of October 23, 2002. The Navy has been, and continues to be, committed to the productive partnership with DTSC and the Regional Water Quality Control Board (RWQCB) that has been cultivated over the past seven years on Naval Station San Diego's Installation Restoration Program. We take your concern regarding the characterization of groundwater underlying IRP Site 7 very seriously and will address that concern in this letter.

The focus of the Naval Station Project Team (DTSC, the RWQCB, and the Navy) has appropriately been on quantifying the risk to human health posed by soil at this site. Groundwater was not recognized as a media of probable impact based on historical operations or current use. In DTSC's 1998 letter commenting on the IRP Site 7 Remedial Site Evaluation that recommended no further action, the agency raised the single issue of unacceptable cancer risk to potential human receptors from soil if the site's asphalt pavement were breached. DTSC recommended either progression to a Remedial Investigation/Feasibility Study or implementation of land use restrictions with institutional controls to prevent migration and or exposure of receptors. DTSC raised no groundwater concerns, and the RWQCB concurred with the Navy's no further action recommendation, contingent on provisions that were later satisfied.

The Draft Remedial Investigation (RI) Report for IRP Site 7 was issued in November 2001, documenting work performed in accordance with the RI Work Plan. Both DTSC and the RWQCB concurred with the August 2001 RI Work Plan for IRP Site 7. The Work Plan formalized agreements made during periodic strategy meetings between DTSC, the RWQCB, and the Navy that soil and groundwater at the site were adequately characterized and the nature and extent of contamination was defined. The RI Work Plan further stated that a risk management decision would be made at the

conclusion of the RI based on the risk to human health calculated using existing site data. No additional soil or groundwater data were requested by either agency for the RI.

The only chemicals identified consistently in groundwater at the site are metals, which are present in concentrations representative of regional ambient conditions. The Navy position with regard to IRP Site 7 remains consistent. The Navy maintains that site media are adequately characterized for purposes of both characterizing nature and extent of contamination and evaluating risk to human health and the environment, and that no further action is warranted at the site. In a letter dated October 17, 2002, the San Diego Regional Water Quality Control Board concurred with the Navy's recommendation for no further action, stating specifically "no further action is required by this agency concerning water quality at Site 7." DTSC's statement that inadequate sampling of groundwater was conducted at IRP Site 7 to evaluate the threat to water quality and the aquatic environment is in conflict with the Project Team's technical approach, consensus, and agreements.

However, in the spirit of cooperation, the Navy proposes the following: The installation of five groundwater-monitoring wells at IRP Site 7 at the locations suggested in DTSC's October 23, letter. Groundwater samples will be filtered for metals, and analyzed for PCBs and the chemicals listed in Table 5-5, page 5-9 of the Ecological Risk Assessment dated July 26, 2002. Soil samples will not be collected unless the field geologist identifies aberrant staining or odor that would warrant analysis. If analyzed, soil data will be available for informational purposes only and for comparison to the existing site data set. Further evaluation, including any recalculation of risk, would only be done if the new data would significantly impact the exposure point concentrations used in the current risk assessment. No additional soil data reporting or risk assessment calculations will be conducted.

Three additional groundwater sampling rounds will be conducted, separated by one-month intervals. The applicability of California Toxics Rule criteria to groundwater underlying IRP Site 7 as suggested by DTSC technical staff is inappropriate because these standards were promulgated for priority toxic pollutants in the state of California for inland surface waters and enclosed bays and estuaries and IRP Site 7 is located 800 feet from the nearest bay. Groundwater concentrations instead should be evaluated relative to previous analytical data for IRP Site 7. If the additional three rounds of sample results confirm previously reported groundwater concentrations, these data will also confirm that IRP Site 7 does not pose an unacceptable risk to human or ecological health and would not require further action. The Navy will then proceed with the issuance of Record of Decision (ROD) as outlined in our proposed plan.

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5SEN.DB/012  
January 16, 2003

In summary, while the Navy disagrees that further evaluation of groundwater is necessary at IRP Site 7, it will nonetheless agree to do so as a good faith response to DTSC's concerns. The Navy invites the Naval Station Project Team to convene to finalize details of the Navy's proposal.

As lead agency, the Navy shares DTSC's interest in proceeding with the timely characterization and cleanup of Naval Station San Diego's remaining IRP Sites, and encourages constructive participation from our regulatory agency partners.

We look forward to working together toward the timely resolution of any remaining issues. Please contact the undersigned at (619) 556-2400 if you wish to discuss this in further detail.

Sincerely,

A handwritten signature in black ink that reads "Darren L. Belton". The signature is written in a cursive, flowing style.

DARREN BELTON  
Remedial Project Manager  
By direction of the Commander

5090.3(a)  
5SEN.DB/012  
January 15, 2003

Copy to:  
Stan Phillippe, Chief Office of Military Facilities  
Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, California 95826-3268

Karen Baker  
Branch Chief  
Geology & Correction  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Nennet Alvarez  
Branch Chief  
Statewide Compliance Division  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Jim Marxen  
Acting Deputy Director  
Office of External Affairs  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

Rick Moss  
Branch Chief  
Hazardous Waste Management  
Office of External Affairs  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

John Robertus, Executive Officer  
California Regional Water Quality Control Board  
San Diego Region  
Site Mitigation and Cleanup Unit  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4340

5090.3(a)  
5SEN.DB/012  
January 15, 2003

John P. Anderson, Senior Engineering Geologist  
California Regional Water Quality Control Board  
San Diego Region  
Site Mitigation and Cleanup Unit  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4340

Laurie Walsh, Water Resource Control Engineer  
California Regional Water Quality Control Board  
San Diego Region  
Site Mitigation and Cleanup Unit  
9174 Sky Park Court, Suite 100  
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Jose Kou  
Branch Chief  
Southern California Permitting Branch  
Department of Toxic Substances Control  
1011 North Grandview Avenue  
Glendale, California 91201

Captain D. Kemp  
Commanding Officer Naval Station San Diego  
3455 Senn Road  
Naval Station San Diego  
92136-5084

Commander J. Wink  
Public Works Office  
2730 McKean Street  
Suite 2, Building 291  
Naval Base San Diego  
San Diego, CA 92136-5294

Commander, Navy Region Southwest  
Assistant Chief of Staff for Environmental  
Code 4512 (Attn: Ms. Theresa Morley)  
33000 Nixie Way  
Building 50, Suite 326  
San Diego, California 92146-5110







DEPARTMENT OF THE NAVY  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
1220 PACIFIC HIGHWAY  
SAN DIEGO CA 92132-5190

5090 3(a)  
Ser 5SEN.DB/340  
December 16, 2003

Mr. Douglas Bautista  
Hazardous Substances Engineer  
Office of Military Affairs  
Department of Toxic Substances Control (DTSC)  
5796 Corporate Avenue  
Cypress, CA 90630

Subj: TRANSMITTAL OF THE DATA SUMMARY REPORT FOR NAVAL  
STATION SAN DIEGO, INSTALLATION RESTORATION PROGRAM (IRP)  
SITE 7

Dear Mr. Bautista:

The three additional rounds of groundwater monitoring requested by DTSC for IRP Site 7, during the public comment period of the Proposed Plan for IRP Sites 5, 7, 11 and 12, is complete. The consolidated package, which contains the results of the May 2003, June 2003, and August 2003, groundwater monitoring events, is provided as enclosure (1). As a courtesy we have summarized the groundwater results within the report (Data Summary Report). However, the complete raw data package for all three events is provided in the CD contained within the report. Please also note that the May and June groundwater results were forwarded to you in August.

The additional groundwater events confirm previously reported groundwater concentrations and that IRP Site 7 does not pose an unacceptable risk to human or ecological health and that no further action for the site is warranted. As agreed upon in our correspondence exchanges and detailed in our meeting on February 27, 2003, upon confirming the previous groundwater results, the Navy will proceed with the issuance of the Record of Decision (ROD). We expect to issue the draft ROD for DTSC review by late February 2004. It is our hope that we now can proceed to site closure as a team and concentrate our efforts on higher priority sites.

Should you require any additional information, or clarification regarding this letter or the attached data, please contact me at (619) 556-7617.

Sincerely,

DARREN BELTON  
Remedial Project Manager  
By direction of the Commander

Enclosures: (1) Data Summary Report for Naval Station San Diego, IRP Site 7,  
Dated December 11, 2003

5090.3(a)  
Ser 5SEN DB/340  
December 16, 2003

Copy to:

Ms. Laurie Walsh  
Regional Water Quality Control Board – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Ms. Denise Klimas  
U.S. Department of Commerce  
National Oceanic and Atmospheric Administration (NOAA)  
c/o California Department of Toxic Substances Control  
Human and Ecological Risk Division  
8800 Cal Center Drive  
Sacramento, CA 95826

Commander J. Wink (w/o encl)  
Public Works Office  
2730 McKean Street  
Suite 2, Building 291  
Naval Base San Diego  
San Diego, CA 92136-5294

Commander, Navy Region Southwest  
Assistant Chief of Staff for Environmental  
Code N4512 (Attn: Ms. Theresa Morley)  
33000 Nixie Way  
Building 50, Suite 326  
San Diego, CA 92147-5110

Tim Heironimus  
Bechtel Environmental, Inc.  
1230 Columbia Street, Suite 400  
San Diego, CA 92101-8502

Lawrence N. Davidson (w/o encl)  
CDM Federal Programs Corporation  
3760 Convoy Street, Suite 210  
San Diego, California 92111

## **ATTACHMENT A**

---

**NO FURTHER ACTION LETTERS**





EPA

San Diego  
Regional Water  
Quality Control  
Board

1771 Clairemont Mesa  
Blvd., Suite A  
San Diego, CA 92124  
619/467-2932  
FAX (619) 571-6972

RECEIVED  
CODE 18

27 MAR 97 20 8 44

March 6, 1997



NO0245.000683  
NAVSTA SAN DIEGO  
SSIC #5090.3

Commanding Officer  
Naval Station, San Diego  
Staff Civil Engineer, Code N464E2  
3395 Sturtevant Street, Suite 6  
San Diego, California 92136-5071  
Attn.: Ms. Theresa Morley

Dear Ms. Morley:

RE: REQUEST FOR NO FURTHER ACTION FOR IR SITE 5 (ADMIRAL  
BAKER GOLF COURSE LANDFILL), SITE 6 (MURPHY CANYON  
HOUSING AREA) AND SITE 11 (FRENCH DRAIN SITE)

Regional Water Quality Control Board (RWQCB) staff received the Navy's request for "No Further Action" for Installation Restoration (IR) Site 5 (Admiral Baker Golf Course Landfill) dated November 21, 1996; IR Site 6 (Murphy Canyon Housing Area) dated December 24, 1996; and IR Site 11 (French Drain Site) dated January 27, 1997. RWQCB staff reviewed the available information and concurs with the Navy recommendation of "No Further Action" for Sites 6 and 11 based on the following:

Site 6

- 1) Hazardous waste or significant soil contamination were not encountered during many ordnance sweeps and site tours. Based on the Navy's letter (see enclosure 1), environmental concerns are not expected from any remaining unexploded ordnance scattered at the site.
- 2) The Army Corps of Engineers (COE) is overseeing Site 6 under the COE Unexploded Ordnance Program.

Site 11

- 1) Based on the letter (see enclosure 2), the Navy has concluded that no contamination (soil or water) was encountered at Site 11. Initially, the site was expected to contain a buried drum potentially containing hazardous substances. Further investigation revealed that the drum was a french drain.

Site 5

RWQCB staff reviewed the Navy's "no further Action" request for Site 5. RWQCB staff cannot concur with the Navy's recommendation based on the following:



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Our mission is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

✓

Ms. Theresa Morley  
NAVSTA-SD Sites 5, 6,  
and 11


-2-

March 6, 1997

- 1) Inactive non-hazardous landfills are regulated under California Code of Regulations, Title 23, Division 3, Chapter 15, Discharges of Waste to Land (23CCR).
- 2) The Admiral Baker Golf Course landfill is subject to post-closure maintenance requirements in accordance with 23 CCR 2581 (b) and (c).
- 3) This site is being proposed as one of the inactive non-hazardous waste landfills to qualify under a General Waste Discharge Requirements for Post-Closure Maintenance, Tentative Order No. 97-11. A copy of the Tentative Order was sent to you on February 14, 1997 for your review.

Based upon the available information and with the provision that the information submitted to this agency was accurate and representative of site conditions, No further action or cleanup is required at Sites 6 and 11. If you have any questions or request more information, please contact Marisela Humphries at (619) 467-2968.

Sincerely,

  
JOHN H. ROBERTUS,  
Executive Officer

JHR:jpa:mh:site5611 mh

File: NAVSTA, PCA 166-89.

Enclosures: 1) Request for No Further Action for Site 6,  
dated December 24, 1996  
2) Request for No Further Action for Site 11,  
dated January 27, 1997

cc: Commanding Officer  
Southwest Division  
Naval Facilities Engineering Command  
Code 1822.RB  
1220 Pacific Highway  
San Diego, California 92132-5190  
Attn: Mr. Rick Bassinet

Ms. Theresa Morley  
NAVSTA-SD Sites 5, 6,  
and 11

-3-

March 6, 1997

Department of Toxic Substances Control  
Region 4  
Federal Facilities Unit  
245 West Broadway, Suite 425  
Long Beach, California 90802-4444  
Attn: Mr. Douglas Bautista

ENCLOSURE 1



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*Our mission is to preserve and enhance the quality of California's water resources and ensure their proper allocation and efficient use for the benefit of present and future generations.*





DEPARTMENT OF THE NAVY  
COMMANDING OFFICER  
NAVAL STATION SAN DIEGO  
3455 SENN RD  
SAN DIEGO, CA 92138-5084

IN REPLY REFER TO:

5090

Set 2/ 003781

24 DEC 1996

Douglas Bautista  
Department of Toxic Substances Control  
245 West Broadway, Suite 350  
Long Beach, CA 90802-4444

Dear Mr. Bautista:

This letter is to request concurrence of a No Further Remedial Action Planned (NFRAP) status for Installation Restoration (IR) Site 6, the Murphy Canyon Housing Area. The Murphy Canyon Housing Area is located approximately nine miles northeast of downtown San Diego and comprises 1,369 acres, see enclosures (1) and (2). The primary land use at Site 6 is family housing, which was built in 1972. Prior to that, the Murphy Ridge area was part of Camp Elliot, a training camp for United States Marine Corps recruits. Murphy Ridge and Murphy Canyon were used extensively for military training and gunnery practice during World War II and the Korean conflict. No hazardous chemical materials or soils have ever been found in the area, and no releases of hazardous materials have ever been recorded. No chemical storage or chemical operations were ever conducted in the area.

The 1986 Initial Assessment Study (IAS) of Naval Station IR sites included Site 6. The primary focus of this section of the IAS was on unexploded ordnance (UXO). Also, because no evidence of hazardous chemical materials was found during the IAS searches, site tours, or referenced ordnance sweeps, the IAS team recommended the site did not warrant further IR study.

Because the site involves UXO, it is the responsibility of the Army Corps of Engineers (COE). For years, the COE has been conducting periodic sweeps of the area. UXO detection and disposal is generally exempted from Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements under 10 USC Section 2701(a)(2). The site is being adequately addressed under another program and there is no evidence that hazardous pollutants or contaminants were ever stored, used or disposed at the site. Consequently, it should not be treated as a CERCLA site, and should be removed from the IR program.

If you have any questions, please contact Ms. Theresa Morley at (619) 556-6438.

Sincerely,

V. E. SMITH  
Captain, U.S. Navy  
Commanding Officer

ENCLOSURE 2



DEPARTMENT OF THE NAVY  
COMMANDING OFFICER  
NAVAL STATION SAN DIEGO  
3455 SENN RD  
SAN DIEGO CA 92136-5084

IN REPLY REFER TO:

5090

Ser 2/ 000205

17 JAN 1997

Mr. Douglas Bautista  
Department of Toxic Substances Control  
Office of Military Facilities  
245 West Broadway, Suite 350  
Long Beach, CA 90802-4444

RECEIVED  
MLA  
JAN 23 1997

SAN DIEGO REGIONAL WATER  
QUALITY CONTROL BOARD

Dear Mr. Bautista:

SUBJECT: INSTALLATION RESTORATION (IR) SITE 11 (FRENCH DRAIN SITE)

The enclosed report details site activities completed to confirm and delineate any contamination at IR Site 11, the French Drain site. Initially, the nine square foot site was thought to contain a partially buried 55 gallon drum potentially containing hazardous material. Upon investigation, the drum turned out to be a french drain for the condensate and pressure vent for the heating and ventilation system of Building 3053. As the results show, there is no contamination contributed by past hazardous waste disposal practices, therefore this site qualifies for a status of "No Further Remedial Action Planned" (NFRAP). Request concurrence in deleting this site from the IR list.

Sincerely,

V. E. SMITH  
Captain, U. S. Navy  
Commanding Officer

Encl:

(1) Pacific Treatment Report for IR Site 11

Copy to:

NAVFACENGCOM Southwest Division, Attn: Rick Basinet/Code 542 RB, 2585 Callaghan  
Highway, Naval Station San Diego, San Diego, CA 92136-5198 (w/o enclosure)  
Regional Water Quality Control Board, Attn: Marisela Humphries, 9771 Clairemont Mesa  
Boulevard, Suite B, San Diego, CA 92124-1331 (w/o enclosure)





a/EPA

San Diego  
Regional Water  
Quality Control  
Board

71 Clairemont Mesa  
Boulevard, Suite A  
San Diego, CA 92124  
(619) 467-2952  
Fax (619) 571-6972

N00245.000006  
NAVSTA SAN DIEGO  
SSIC #5090.3

Pete Wilson  
Governor

August 7, 1997

Commanding Officer  
Naval Station, San Diego  
Staff Civil Engineer, Code N464E2  
3395 Sturtevant Street, Suite 6  
San Diego, California 92136-5071  
Attn.: Ms. Theresa Morley

Dear Ms. Morley:

RE: REQUEST FOR NO FURTHER ACTION FOR IR SITE 5 (ADMIRAL  
BAKER GOLF COURSE LANDFILL)

Regional Water Quality Control Board (RWQCB) staff received the Navy's request for "No Further Action" for Installation Restoration (IR) Site 5 (Admiral Baker Golf Course Landfill) dated November 21, 1996. RWQCB staff reviewed the available information and concurs with the Navy recommendation of "No Further Action" under the Environmental Restoration Navy Account (ERNA) program (previously known as DERA program) for Site 5, based on the following:

- 1) The RWQCB Land Discharge Unit, under California Code of Regulations, Title 27, Division 2, Combined State Water Resources Control Board (SWRCB)/California Integrated Waste Management Board (CIWMB) regulates inactive non-hazardous landfills, including Admiral Baker Golf Course landfill. This landfill is subject to post-closure maintenance requirements in accordance with 27 CCR, Article 2, Section 21090.
- 2) This site is regulated under General Waste Discharge Requirements for Post-Closure Maintenance, Order No. 97-11.

Based upon the available information and with the provision that the information submitted to this agency was accurate and representative of site conditions, RWQCB staff agrees with the "No Further Action" for Site 5 from the Installation Restoration Program.

If you have any questions or request more information, please contact Marisela Humphries at (619) 467-2968.

Sincerely,

JOHN P. ANDERSON, Senior Engineering Geologist  
Site Mitigation and Cleanup Unit  
JPA:mh:site5.mh

Ms. Morley  
Site 5, Admiral Baker  
Golf Course

-2-

August 7, 1997

File: NAVSTA, PCA 166-89

cc: Commanding Officer  
Southwest Division  
Naval Facilities Engineering Command  
Code 1822.RB  
1220 Pacific Highway  
San Diego, California 92132-5190  
Attn: Mr. Rick Bassinet

Department of Toxic Substances Control  
Region 4  
Federal Facilities Unit  
245 West Broadway, Suite 425  
Long Beach, California 90802-4444  
Attn: Mr. Douglas Bautista



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*Our mission is to preserve and enhance the quality of California's water resources, and  
ensure their proper allocation and efficient use for the benefit of present and future generations.*



Cal/EPA

Department of  
Toxic Substances  
Control

245 West Broadway,  
Suite 425  
Long Beach, CA  
90802-4444

October 14, 1997



N00245.000009  
NAVSTA SAN DIEGO  
SSIC #5090.3

Pete Wilson  
Governor

James M. Strock  
Secretary for  
Environmental  
Protection

Commanding Officer  
U.S. Naval Station  
Environmental, Code 22  
3395 Sturtevant Street, Suite 6  
San Diego, California 92136-5071  
Attn: Ms. Theresa Morley

Dear Ms. Morley:

**INSTALLATION RESTORATION (IR) SITE 11 (FRENCH DRAIN)**

The Department of Toxic Substances Control (DTSC) has completed its review of your request for DTSC's concurrence for no further action for the subject site. The San Diego Regional Water Quality Control Board has issued a letter of concurrence for no further action for this site on March 6, 1997.

As a result of our review, DTSC concurs that no further action is needed at Site 11 in accordance with California Health and Safety Code, Chapter 6.8. This determination was based on our review of the following documents:

- (1) Site Removal and Confirmation Report completed in March 1996 by Pacific Treatment Environmental Services, Inc., submitted by the Navy to DTSC on January 28, 1997. This report describes the removal action and confirmation sampling carried out for soil and groundwater at the site.
- (2) As-built drawings of heating and ventilating system for building 3035, submitted to DTSC on April 14, 1997.
- (3) Visual Inspection and Certification: Ceiling and Wall Radiators in building 3053, submitted to DTSC on August 18, 1997.
- (4) Final response to DTSC comments on the Site Removal and Confirmation Report, dated September 19, 1997.

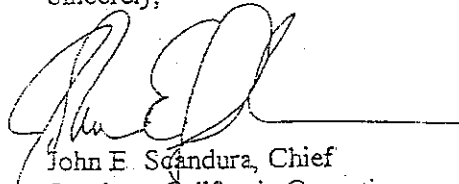


Commanding Officer  
U.S. Naval Station  
October 14, 1997  
Page 2

Based on the Site Removal and Confirmation Report, volatile and semi-volatile compounds, metals, and PCBs in the soil were found to be within their respective Preliminary Remediation Goals (PRGs), except for two semi-volatiles whose PRGs are below the detection limit used during the analyses. However, as all the other semi-volatiles were non-detect, it is unlikely that these chemicals exceeded their respective PRGs. The as-built drawings and the Visual inspection and Certification issued by the facility's building Maintenance Director shows that the condensate that is being periodically discharge to the French drain does not get in contact with any hazardous constituents, therefore the French drain is not a source of contamination.

Should you have any further questions, please call Mr. Douglas Bautista at (562) 590-4893, or Ms. Shelia Lowe at (562) 590-5916.

Sincerely,



John E. Scandura, Chief  
Southern California Operations  
Office of Military Facilities

cc: Mr. Ed Dias  
Environmental Engineer  
Southwest Division  
Naval Facilities Engineering Command  
Code 1812 ED  
San Diego, California 92132-5181

Ms. Laurie A. Walsh  
California Regional Water Quality  
Control Board  
9771 Clairemont Mesa Boulevard, Suite B  
San Diego, California 92124-1331





Cal/EPA

San Diego  
Regional Water  
Quality Control  
Board

9771 Clairemont Mesa  
Blvd., Suite A  
San Diego, CA 92124  
(619) 467-2952  
FAX (619) 571-6972

May 12, 1998


Commanding Officer  
Naval Station Environmental  
Code 22  
3395 Sturtevant Street, Suite 6  
San Diego, CA 92136-5071  
Attn.: Theresa Morley

Dear Ms. Morley:

**RE: FINAL RESPONSE TO SDRWQCB COMMENTS ON FINAL EXPANDED  
SITE INSPECTION REPORT SITE 12, BRINSER STREET PARKING AREA,  
SAN DIEGO FEBRUARY, 1998**

Regional Board staff received and reviewed response to comments on the subject report prepared for the Navy by Bechtel. Our concerns have been addressed, therefore we have no further comments. If you have any questions please call me at (619) 467-2970.

Respectfully,

  
Laurie Walsh  
Sanitary Engineering Associate

LAW:JPA:law  
File No. 30.0089.N02  
q:\winword\navsta\cls\_s12.doc

cc: Douglas Bautista, DTSC, Long Beach, Office of Military Facilities, 245 W. Broadway,  
Suite 425, Long Beach, CA 90802-4444

Commanding Officer, Attn., Ed Dias, Southwest Division, Naval Facilities Engineering  
Command, Code 542 RB, 2585 Callagan Hwy, Bldg 99, San Diego, CA 92136-5198

N00245.000808  
NAVSTA SAN DIEGO  
SSIC #5090.3



Pete Wilson  
Governor



Recycled Paper

*Our mission is to preserve and enhance the quality of California's water resources, and  
ensure their proper allocation and efficient use for the benefit of present and future generations.*





## Department of Toxic Substances Control

Jesse R. Huff, Director  
5796 Corporate Avenue  
Cypress, California 90630

N00245.000855  
NAVSTA SAN DIEGO  
SSIC #5090.3



ate Wilson  
overnor

September 4, 1998

Peter M. Rooney  
Secretary for  
Environmental  
Protection

U.S. Naval Station  
3395 Sturtevant Street, Suite 6  
San Diego, California 92136-5071  
Attn: Ms. Leslie L. McLaughlin  
Environmental Manager

Dear Ms. McLaughlin:

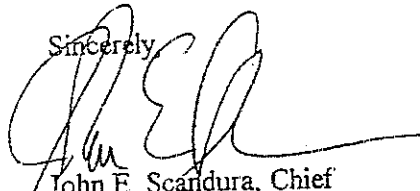
### PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT FOR INSTALLATION RESTORATION (IR) SITE 12, BRINSER PARKING AREA, SAN DIEGO NAVAL STATION

The Department of Toxic Substances Control (DTSC) has completed its review of the above document with revisions submitted to DTSC on September 1, 1998. This report documented the soil removal activities conducted, confirmatory soil sampling, and analytical results for the Brinser Parking Area.

Confirmatory soil analytical results and the results of the Baseline Risk Assessment conducted for the site showed that organic and inorganic constituents were within background and/or acceptable residential health-based standards. Based on the information presented, DTSC concurs with the no further action recommendation for Site 12.

If you have any questions, please feel free to contact Mr. Douglas Bautista at (714)484-5442.

Sincerely,

  
John E. Scandura, Chief  
Office of Military Facilities  
Southern California Operations

cc: See next page.

Commanding Officer  
U.S. Naval Station  
September 4, 1998  
Page 2

cc: U S. Naval Station  
Code 22  
3395 Sturtevant Street, Suite 6  
San Diego, California 92136-5071  
Attn: Ms. Theresa Morley

Mr. Ed Dias  
Environmental Engineer  
Southwest Division  
Naval Facilities Engineering Command  
Code 542 ED  
San Diego, California 92132-5181

Ms. Kathie Beverly  
Environmental Engineer  
Southwest Division  
Naval Facilities Engineering Command  
Code 542 KB  
San Diego, California 92132-5181

Ms. Laurie A. Walsh  
California Regional Water Quality  
Control Board  
9771 Clairemont Mesa Boulevard, Suite B  
San Diego, California 92124-1331



Winston H. Hickox  
Agency Secretary  
California Environmental  
Protection Agency

## Department of Toxic Substances Control

Edwin F. Lowry, Director  
5796 Corporate Avenue  
Cypress, California 90630



Gray Davis  
Governor

September 16, 2002

Captain Derek B. Kemp  
Commanding Officer  
Naval Station San Diego  
3455 Senn Rd  
San Diego, CA 92136-5084

Dear Captain Kemp:

On August 29, 2002, the Naval Station San Diego issued a public notice to the San Diego Union Tribune of a Proposed Plan for Installation Restoration (IR) Sites 5, 7, 11 and 12. This Plan, which proposes no further action as the cleanup remedy for the four sites, was mailed to residents and businesses in the vicinity of the Naval Station on September 13, 2002. A public meeting is scheduled for this document on September 18, 2002.

The Department of Toxic Substances Control (DTSC) was not provided with sufficient opportunity to review, comment and concur with the release of this proposed plan. There were technical issues raised during the remedial investigation that have not been resolved to satisfaction of DTSC, and DTSC has not concurred with any remedial investigation/feasibility study reports for Site 7. Section 121(f) of the Comprehensive Environmental Response Compensation and Liability Act requires that federal facilities provide state agencies with the opportunity to participate in the planning and selection of remedial actions. In Section 11 of the September 2001 Management Guidance for the Defense Environmental Restoration Program, the military is committed to providing for the substantive involvement of state regulatory agencies throughout the Program.

While DTSC believes that no further action is an appropriate remedy for Sites 5, 11 and 12, DTSC cannot concur with such a determination for Site 7, the former sewage treatment plant. Although the risk to human health and environment from soil contamination appears to be acceptable at this time, DTSC's review of groundwater data indicated that inadequate sampling was conducted to evaluate the threat to water quality.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at [www.dtsc.ca.gov](http://www.dtsc.ca.gov).*

Captain Derek B. Kemp  
September 16, 2002  
Page 2

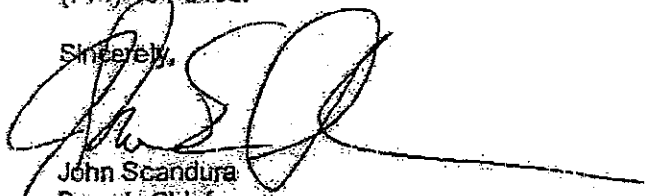
and aquatic environments. The Naval Station's basis for no further action is from one sampling event at three wells in 1992, and another sampling event at four other wells in 1998. This conflicts with the acceptable practice for characterizing the risk of contaminants in ground water by conducting sampling of groundwater wells once every three months for at least one year.

The agencies were not provided the opportunity to verify, prior to the public release, that the public notification and participation efforts complied with applicable state law. To ensure early and meaningful public participation opportunities, the Department routinely ensures outreach documents are released at or before the start of a public comment period. This Proposed Plan was mailed 10 days after the comment period started and 5 days short of the community meeting, thereby reducing available time for the public's review and participation.

DTSC requests that the Naval Station remove the proposed no further action designation from Site 7 until such time that it is determined by federal and state regulatory agencies that contamination in ground water does not pose a threat to human health and aquatic environments. Should the Naval Station choose not to comply with this request, DTSC is prepared to use its authorities pursuant to the California Health and Safety Code Chapter 6.5 (section 25100 et seq.) and Chapter 6.8 (section 25300 et seq.), and the federal Resource Conservation and Recovery Act, to ensure that the risks posed by contamination at Site 7 are adequately characterized and remedied.

Your consideration of DTSC's concerns and request is greatly appreciated. If you have any questions, please feel free to contact Mr. Douglas Bautista or me at (714) 484-5458.

Sincerely,



John Scandura  
Branch Chief  
Southern California Branch  
Office of Military Facilities

cc: Captain Gary Engle  
Commanding Officer  
Southwest Division  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, CA 92132-5190

Captain Derek B. Kemp  
September 16, 2002  
Page 3

cc: John Robertus, Executive Officer  
San Diego Regional Water Quality Control Board  
9771 Claremont Mesa Blvd., Suite A  
San Diego, California 92124-1324

Stan Phillippe  
Division Chief  
Office of Military Facilities  
Department of Toxic Substances Control  
8800 Cal Center Drive  
Sacramento, California 95826

Jim Marxen  
Acting Deputy Director  
Office of External Affairs  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

Rick Moss  
Branch Chief  
Hazardous Waste Management  
Permitting Division  
Department of Toxic Substances Control  
1001 "I" Street, 22<sup>nd</sup> Floor  
Sacramento, California 95814

Karen Baker  
Branch Chief  
Geology & Correction Action  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Nennet Alvarez  
Branch Chief  
Statewide Compliance Division  
Department of Toxic Substances Control  
5796 Corporate Avenue  
Cypress, California 90630

Captain Derek B. Kemp  
September 16, 2002  
Page 4

cc: Jose Kou  
Branch Chief  
Southern California Permitting Branch  
Department of Toxic Substances Control  
1011 North Grandview Avenue  
Glendale, California 91201





# California Regional Water Quality Control Board

## San Diego Region

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb9/>  
9174 Sky Park Court, Suite 100, San Diego, California 92123-4340  
Phone (858) 467-2952 • FAX (858) 571-6972



Gray Davis  
Governor

October 17, 2002

Navy Region Southwest  
Assistant Chief of Staff for Environmental  
Code N4512  
33000 Nixie Way, Bldg. 50, Suite 326  
San Diego, CA 92147-5110  
Attn: Ms. Theresa Morley

RWQCB File No. 30-0089.05

**SUBJECT: RESPONSE TO COMMENTS – May 24, 2002  
DRAFT REMDIAL INVESTIGATION IR SITE 7  
NAVAL STATION - SAN DIEGO**

Dear Ms. Morley:

This letter responds to the Navy's responses to our comments on the Draft Remedial Investigation report for IR Site 7. We received the document on September 3, 2002. In general, your responses to our comments were adequate however, we would like to point out a few specific issues.

In the Navy's response to Comment 1c, the Navy misinterpreted the intent of the statement discussed in our June 13, 1996 letter to the San Diego County DEH regarding deep aquifers outside the influence of shallow petroleum releases. Specifically the Navy states "*Although Site 7 is not a petroleum release site, the groundwater sampled at the site is at a depth similar to petroleum sites in the area. Based on the RWQCB's own statement that petroleum sites are outside the influence of any production in the deeper aquifer, the conclusion is that there is no vertical hydraulic connection between the shallow groundwater and any deeper more productive aquifer than may exist beneath Site 7.*" As stated herein, Site 7 is NOT a petroleum case.

The intent of the original statement was based on describing sensitive aquifer areas as it relates to the Regional Board's Interim Guidance for petroleum-only cases. Most petroleum releases associated with gasoline service stations have smaller, near-source plumes associated with them. Given that these constituents are light, non-aqueous phase liquid constituents and amenable to biodegradation, the likelihood of significant impact to production wells in the deeper aquifer may be low. This statement was also made prior to the general knowledge about the contaminant - MTBE. However, chlorinated solvents, like the ones found at Naval Station, are dense, non-aqueous phase liquid constituents and are not amenable to significant biodegradation and will

### California Environmental Protection Agency

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likely remain a long-term threat to the deeper aquifer(s). The Navy's statement that "*... the conclusion is that there is no vertical hydraulic connection between the shallow groundwater and deeper more productive aquifers ...*" is neither implied nor explicitly stated in the June 13, 1996 letter. In fact, the Regional Board cannot conclude that no vertical hydraulic connection exists between the uppermost aquifer(s) and other aquifer(s) at depth.

Secondly, the Navy failed to answer our question in their response to Comment 1d. The Navy did not describe the exact administrative process currently in place at Naval Station to notify personnel planning to conduct a project (e.g. ground water dewatering) or install a well at Naval Station whereby exposure to sites contaminants may occur. The response provided relies on the San Diego County (DEH) well permitting process and does not describe the internal Navy process. While DEH does attempt to intercept permit applications in areas where pollution exists, the process is not 100% reliable and does not provide redundancy. It is expected that an internal check by the Navy would provide some redundancy to this process thereby attempting to minimize the potential for the process to fail and result in exposure of site contaminants to various receptors. Therefore, a detailed explanation is requested for the internal Navy process/notification procedure. **Please provide this information by December 31, 2002.**

Lastly, the Navy prematurely removed the ground water monitoring wells at Site 7 before either DTSC or the Regional Board had the opportunity to review the final RI for the Site. This issue presented itself during our review of the Draft RI and our detailed discussions with DTSC and the Navy regarding ground water characterization. Unfortunately, the wells were removed with only one round of ground water data available for consideration at this site. Although this represents a very limited data set Site 7 does not appear to pose a significant threat to either surface or ground water, based on the following observations.

- Site 7 was a municipal sewage treatment plant. As such, these types of sites typically do not pose the same level of environmental threat when compared to disposal sites (e.g. hazardous waste disposal sites, plating shop leaks, or landfills). Particularly given the age of when the facility last operated (~1963).
- Wells were installed along the perimeter of the site. Although only one set of ground-water samples were collected from MW-1, MW-2 and MW-3 in 1992 and one set collected from MW-4, MW-5, MW-6, and MW-7 in 1997, constituents found in ground water do not exceed water quality objectives for the protection of the beneficial uses of surface or ground water. If a significant impact to ground water had occurred at the site, it is very likely that one of these 7 wells would have

### California Environmental Protection Agency

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October 17, 2002

intercepted the pollution. Additionally, the wells appear to be constructed properly and the analytical quality control data appear to be adequate.

- Site 7 is approximately 900 feet from the nearest surface water (San Diego Bay). Given the topography of the site, the lithology, and depositional environment of the sediments/fill materials, it is unlikely that these low concentration constituents would migrate to surface water. Even if they did, these concentrations are all below water quality objectives.
- Ground water beneath Naval Station has no designated beneficial uses.

For the reasons stated above, no further action is required by this agency concerning water quality at Site 7. However, the Navy is required to submit to the Regional Board by **December 31, 2002** a detailed description of its internal process for notification to personnel of potential exposure to site contaminants. If you have any questions related to this matter please contact me at (858) 467-2975 or Laurie Walsh at (858) 467-2970.

Respectfully,

John P. Anderson  
Senior Engineering Geologist  
Site Mitigation and Cleanup Unit

JPA:jpa:law:draft RI site 7 rsp to cmts\_MAY02\_ltr.doc

Cc: Mr. Doug Bautista, DISC, Office of Military Facilities Southern California Operations,  
5796 Corporate Avenue Cypress, CA 90630.

Mr. Daren Belton, SWDIV, Naval Facilities Engineering Command Code 5SEN.DB, 2582  
Callagan Highway, Bldg. 99 San Diego, CA 92136-5198

***California Environmental Protection Agency***

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DEPARTMENT OF THE NAVY  
SOUTH BAY AREA FOCUS TEAM  
SOUTHWEST DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
2585 CALLAGAN HWY, BLDG 99  
SAN DIEGO, CALIFORNIA 92136-5198

5090.3(a)  
Ser OPME DB/243  
October 25, 2004

Mr. Douglas Bautista  
Remedial Project manager  
Office of Military Facilities  
California Department of Toxic Substances Control (DTSC)  
5796 Corporate Avenue  
Cypress, CA 90630

Subj: DRAFT FINAL REMEDIAL ACTION PLAN/RECORD OF DECISION (NO ACTION) FOR NAVAL STATION SAN DIEGO, INSTALLATION RESTORATION PROGRAM (IRP) SITES 5, 7, 11, AND 12 AND RESPONSE TO DEPARTMENT OF TOXIC SUBSTANCES CONTROL'S COMMENTS OF AUGUST 16, 2004, REGARDING THE NAVY'S DRAFT RAP/ROD FOR IRP SITES 5, 7, 11 AND 12.

Dear Mr. Bautista:

We are pleased to submit the Draft Final Record of Decision (ROD) for Naval Station San Diego IRP Sites 5, 7, 11, and 12 (enclosure (1)). Upon DTSC and the Regional Water Quality Control board acceptance of the ROD and endorsement of the Navy's signed declaration page (enclosure (2)), we will finalize the ROD and distribute the copies accordingly.

We have incorporated your comments of August 19, 2004, (enclosure (3)) with one exception. The letter from the Regional Water Quality Control Board (RWQCB) regarding IRP Site 6 dated December 24, 1996, in Attachment "A" will not be removed from the document as suggested. Although the letter pertains to IRP Site 6, which is not part of this RAP/ROD, it will remain in the document as it is enclosure (1) to the RWQCB's letter dated March 06, 1997, to Ms. Theresa Morley regarding the Navy's request for no further action for IRP Site 5, Site 6, and Site 11. However, we agree that IRP Site 6 is not being evaluated within this ROD.

As noted in the email dated August 19, 2004, the RWQCB has no comments on the draft ROD for IRP Sites 5, 7, 11 and 12 (enclosure (4)).

If you are in concurrence with the ROD, please endorse the declaration page, enclosure (2), and return to the undersigned for hand delivery to RWQCB.

5090 3(a)  
Ser OPME.DB/243  
October 25, 2004

If you have question or comments, please contact the undersigned at (619) 556-7617

Sincerely,



DARREN L. BELTON  
Remedial Project Manager  
By direction of the Commander

- Enclosures: (1) Draft Final Remedial Action Plan/Record of Decision (No Action)  
For Naval Station San Diego, IRP Sites 5, 7, 11, and 12,  
Dated September 2004  
(2) Unsigned Declaration Page for Final Remedial Action Plan/Record of  
Decision (No Action) For Naval Station San Diego, IRP Sites 5, 7, 11,  
and 12 September 2004  
(3) Email from Douglas Bautista, DTSC, Dated August 16, 2004,  
Transmitting comments on Draft ROD  
(4) Email from Laurie Walsh, RWQCB, Dated August 19, 2004.

Copy to:  
CAPT Derek B. Kemp  
Commanding Officer  
Naval Station San Diego  
3455 Senn Road  
San Diego, CA 92136-5084

Laurie Walsh, Water Resource Control Engineer  
California Regional Water Quality Control Board  
San Diego Region  
Site Mitigation and Cleanup Unit  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4340

Ms. Denise Klimas  
National Oceanic and Atmospheric Administration  
c/o California Department of Toxic Substances Control  
Human and Ecological Risk Division  
P.O. Box 806  
Sacramento, CA 95812-0806

5090.3(a)  
Ser OPME DB/243  
October 25, 2004

Commander, Navy Region Southwest  
Assistant Chief of Staff for Environmental  
Code N4512 (Attn: Ms. Theresa Morley)  
33000 Nixie Way  
Building 50, Suite 326  
San Diego, CA 92147-5110

Tim Heironimus (w/o enclosure)  
Bechtel Environmental, Inc.  
1230 Columbia Street, Suite 400  
San Diego, CA 92101-8502

# **DECLARATION**



**Declaration**

---

Signature: \_\_\_\_\_

Derek B. Kemp, Captain  
Commanding Officer, Naval Station San Diego  
United States Department of the Navy  
Lead Federal Agency

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Mr. John E. Scandura, Chief  
Southern California Operations  
Office of Military Facilities  
Department of Toxic Substances Control

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Mr. John H. Robertus  
Executive Officer  
California Regional Water Quality Control Board  
San Diego Region

Date: \_\_\_\_\_

**Belton, Darren L CIV EFDSW, EFDSW**

---

From: Douglas Bautista [DBautist@dtsc.ca.gov]  
Sent: Monday, August 16, 2004 3:31 PM  
To: Belton, Darren L CIV EFDSW, EFDSW; Dias, Edward K CIV EFDSW, EFDSW  
Subject: draft RAP/ROD Sites 5,7,11,&12

Ed  
Darren

The following are DTSC comments on the draft RAP/ROD for the above referenced sites:

1. Section 5.3.2.5 Removal site evaluation

Groundwater

States that only analytical results reported above the detection limit are summarized in table 5-6. Please Identify detection limits.

2. Section 5.3.2.6- Additional Investigation

States no PCB was reported in the samples. Please clarify if reported here means not detected above detection limit. Also, identify detection limits.

3. Section 7.3.1.1 Conceptual Site Model

2nd to the last paragraph on page 7-26  
insert (table 5-6) between "results" and "and" in the last sentence.

4. No Further Action Letters

Letter to DTSC dated 24 Dec 1996 regarding Site 6 is not relevant and should be removed from the RAP/ROD document.

Douglas Bautista  
DTSC  
Office of Military Facilities  
Southern California Branch  
Tel: 714.484.5442  
Fax: 714.484.5437

Enclosure ( 3 )

Belton, Darren L CIV EFDSW, EFDSW

---

From: Laurie Walsh [walst@rb9.swrcb.ca.gov]  
Sent: Thursday, August 19, 2004 9:21 AM  
To: Belton, Darren L CIV EFDSW, EFDSW  
Cc: DBautist@dtsc.ca.gov; Morley, Theresa L CIV  
Subject: No Further Action ROD for Naval Station IR Sites 5, 7, 11, and 12

Darren

I received your voicemail yesterday. The Regional Board does not have any comments on the Naval Station No Further Action ROD for IR Sites, 5, 7, 11, and 12.

Laurie

Enclosure (1)

5090.3(a)  
Ser OPME DB/243  
October 25, 2004

Blind copy to:

OPM, OPME, OPME ED, OPME MC, 09C.DS (w/enclosure), EVR.DS (w/enclosure)

Writer: D. Belton, 67617

Typist: G. Gerard, 20 Sep 04, J:\5S0\Draft-Final NAVSTASD ROD IRP 5\_7\_11&12.doc



Terry Tamminen  
Agency Secretary  
Cal/EPA



## Department of Toxic Substances Control

5796 Corporate Avenue  
Cypress, California 90630



Arnold Schwarzenegger  
Governor

November 23, 2004

Mr. Darren Belton (ROPME.DB)  
Department of the Navy  
South Bay Area Focus Team  
Naval Facilities Engineering Command  
2585 Callahan Highway, Building 99  
San Diego, California 92136-5198

DRAFT FINAL REMEDIAL ACTION PLAN/RECORD OF DECISION FOR SITES  
5,7,11, AND 12, DATED SEPTEMBER 2004.

Dear Mr. Belton:

The Department of Toxic Substances Control (DTSC) has completed the review of the above referenced document dated September 2004 and received on October 26, 2004. The Department acknowledges that all of our comments have been addressed and therefore, concurs with the Draft Final Remedial Action Plan/Record of Decision (RAP/ROD) for Sites 5,7,11 and 12.

Enclosed is the declaration page signed by the authorized representative of the DTSC signifying approval of the RAP/ROD. Also enclosed is a copy of DTSC's environmental impact notice of exemption that should be public noticed along with the final RAP/ROD.

Thank you for the opportunity to work as a team member in the Navy's installation Restoration program. If you have any questions please contact Mr. Douglas Bautista at (714) 484 5442.

Sincerely,

Shelia Lowe, Unit Chief  
Office of Military Facilities  
Southern California Branch

Enclosures

Mr. Darren Belton  
November 23, 2004  
Page 2

cc: Captain Derek B. Kemp  
Commanding Officer  
Naval Station San Diego  
3455 Senn Road  
San Diego, California 92136-5084

Mr. Walter Sandza, Code EVR  
Naval Facilities Engineering Command Southwaest  
1220 Pacific Highway, Room 207  
San Diego, CA 92136-5198

Ms. Denise M. Klimas  
National Oceanic and Atmospheric Administration  
Office of Response and Restoration  
Coastal Resources Coordinator for the State of California  
C/o Department of Toxic Substances Control  
Human and Ecological Risk Division  
P.O. Box 806  
Sacramento, California 95812-0806

Ms. Theresa Morley  
Environmental, Code N4512.TM  
33000 Nixie Way  
Bldg. 50, Suite 326  
San Diego, CA 92147-5110

Mr. Ed Dias (ROPME ED)  
Department of the Navy  
South Bay Area Focus Team  
Naval Facilities Engineering Command  
2585 Callahan Highway, Building 99  
San Diego, California 92136-5198

Ms. Laurie Walsh  
California Regional Water Quality Control Board,  
San Diego Region 9  
9174 Sky Park Court, Suite 100  
San Diego, California 92123

Mr. Darren Belton  
November 23, 2004  
Page 3

cc: Mr. Pete Bishop  
275 Las Flores Drive  
Chula Vista, California 91910-2914

Ms. Rita McIntyre  
30 J Street  
Chula Vista, California 91920

Mr. Jerry McNutt  
522 Tallow Court  
Chula Vista, California 91911-5636

Mr. Gene Mullaly  
6869 Belle Glade Avenue  
San Diego, California 92119

Mr. Craig Woempner  
3816 Birch Street  
San Diego, California 92113

## NOTICE OF EXEMPTION

To: Office of Planning and Research  
State Clearinghouse  
P.O. Box 3044, 1400 Tenth Street, Room 212  
Sacramento, CA 95812-3044

From: Department of Toxic Substances Control  
Site Mitigation and Brownfield Reuse Program  
Office of Military Facilities  
5796 Corporate Avenue  
Cypress, California 90630

Project Title: Remedial Action Plan/Record of Decision for Sites 7, 11, and 12.

Project Location - Specific: San Diego Naval Station

Project Location - City: San Diego

Project Location - County: San Diego

**Description of Project:**

The project is the determination that no further activities will be required at Sites 7, 11, and 12 to achieve site remediation. A description of these three sites and the investigation and analysis conducted are as follows:

Site 7 - was the location of the city of San Diego-owned and operated Harbor Drive Sewage Treatment Plant which operated from 1951 to 1963. Spills and leaks from tanks and pipelines associated with sewage storage and treatment processes may have occurred. Naval Station acquired the property in 1977, and the plant was demolished in 1978. Site 7 is currently paved and used as a parking lot. Investigation of soil and groundwater at the site found the only residual constituent concern were Polychlorinated Biphenyls (PCB's) and petroleum based contaminants. A site specific baseline risk assessment showed that the level of these constituents of concern are within an acceptable health based concentrations suitable for unrestricted future land use. No further action is required at the site.

Site 11 is a French drain located in an asphalt paved parking and storage area at the northwest corner of Building 3053 at Naval Station San Diego. The site is 9 square feet in size. The French Drain is constructed of corrugated vertical pipe approximately 36 inches in diameter. The drain is filled with gravel and extends into the ground 10 feet. The drain receives condensate from two steam lines associated with the heating and ventilation system for Building 3053. Investigation of soil and groundwater at the site showed that there are no releases of hazardous constituents at the site that pose unacceptable risk to human health and the environment. The constituents of concern were hydrocarbons and metals. A site specific screening risk assessment found that the levels of these contaminants were suitable for unrestricted future land use and below residential risk thresholds. No further action is required at the site.

Site 12 is a paved parking lot and staging area in the western portion of Naval Station San Diego, near Pier 7. It is bounded by Woden Street on the north and Brinser Street on the west. The site extends approximately 750 feet in a north-south direction and 550 feet in an east-west direction. Site 12 was part of an area used for construction of floating dry docks and barges during World War II. Metals and other petroleum based contaminants exceeding background and/or risk based values. A removal action involving the excavation and offsite disposal of approximately 5,000 tons of soil contaminated with the highest concentrations of petroleum based contaminants and metals was conducted by the Navy in 1996. A risk assessment conducted after the removal action showed that contaminants have been reduced to below residential threshold health based risk levels and suitable for unrestricted future land use. No further action is necessary for the site.

Name of Public Agency Approving Project: California Environmental Protection Agency,  
Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Department of the Navy

**Exempt Status: (check one)**

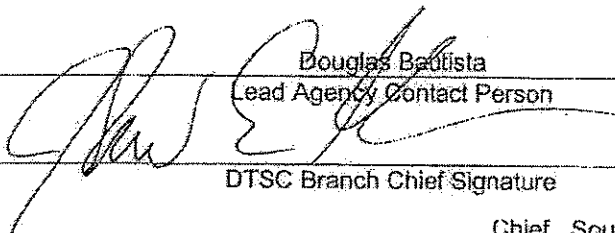
- ☐ Ministerial (Sec. 21080(b)(1); 15268);  
☐ Declared Emergency (Sec. 21080(b)(3); 15269(A));  
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));  
☐ Categorical Exemption. State type and section number: \_\_\_\_\_  
☐ Statutory Exemptions. State code number: \_\_\_\_\_  
☒ General Rule (Sec. 15061(b)(3))



Exemption Title: With Certainty, No Possibility of a Significant Effect on the Environment

Reasons Why Project is Exempt:

Based on the analysis above, no further actions are necessary to remediate these sites. They are suitable for unrestricted use without any unacceptable risk to human health or the environment. No land use restrictions will be required. The sites also do not pose an ongoing risk to groundwater quality or biological resources. Therefore, there is no possibility of a significant environmental effect from either physical activities or the decision to not require further action.

  
Douglas Battista  
Lead Agency Contact Person

(714) 484 5442

Phone #

DTSC Branch Chief Signature

9/27/04  
Date

John E. Scandura  
DTSC Branch Chief Name

Chief, Southern California  
Office of Military Facilities  
DTSC Branch Chief Title

TO BE COMPLETED BY OPR ONLY

Date Received For Filing and Posting at OPR: \_\_\_\_\_



## **ATTACHMENT B**

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### **ADMINISTRATIVE RECORD FILE INDEX FOR NO ACTION SITES**



**TECHNICAL DOCUMENTS FOR  
NO ACTION SITES**



NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

TECHNICAL DOCUMENTS FOR SITE 5

UIC No. / Rec. No.					Prc. Date	Author Affil.	Subject		Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Record Date	Author	Recipient Affil.	Recipient					FRC Access. No.	Box No.
				EPA Cat. #								CD No.	
N00245 / 000315				05-26-1995	NEESA PORT	INITIAL ASSESSMENT STUDY NEESA	13-087	ADMIN RECORD	BASIN	001	B2-B - BECHTEL	NATIONAL	
	RPT			05-01-1986	HUENEME				DPDO	002			
				NONE	W. EAKES				IAS	003			
	NONE			01.1	NAVSTA SAN				SALVAGE YARD	004	SW02082311	IMAGED	
	00154				DIEGO					005	SDNS_003		
										006			
N00245 / 000262				11-29-2001	DEPARTMENT OF	RECORD OF DECISION FOR THE		ADMIN RECORD	EIS	005	B2-B - BECHTEL	NATIONAL	
	NONE			11-25-1988	THE ARMY	FEASIBILITY STUDY OF REMEDIAL ACTION		INFO	EOD	006			
	MISC			NONE	C. MYERS	ALTERNATIVES FOR CONVENTIONAL		REPOSITORY	FS		SUB-AREA A		
						EXPLOSIVE ORDNANCE ITEMS ON THE			NEPA		SUB-AREA B	SW02082309	
	NONE				INTERESTED	FORMER CAMP ELLIOT (SEE AR #261 - FS,			ORDNANCE		SUB-AREA C	IMAGED	
	00005				PARTIES	EIS)			REMEDIAL ACTIO		SUB-AREA D	SDNS_004	
									ROD		SUB-AREA E		
											SUB-AREA F		
N00245 / 000007				05-26-1994	NAVFAC -	RESPONSE TO REQUEST FOR FURTHER		ADMIN RECORD	BASIN	001	BECHTEL	NATIONAL	
	SWDIV 5090			07-13-1990	SOUTHWEST	INFORMATION TO CHARACTERIZE NAVSTA			DPDO	002			
				NONE	DIVISION	FOR SCREENING SITE INSPECTION, SWA			IAS	003			
	SER 04861			01.0	DANA N.	FOR A POTENTIAL RELEASE			SWAT	004	SW02011001		
	LTR				SAKAMOTO					005			
	NONE				EPA					007			
	00002				CAROLYN					008			
					DOUGLAS								
N00245 / 000022				07-11-1994	NAVSTA SAN	DRAFT SOLID WASTE ASSESSMENT TEST		ADMIN RECORD	SWAT	002	BECHTEL	NATIONAL	
	NAVSTASD SER			04-11-1991	DIEGO	PROPOSALS FOR ADMIRAL BAKER GOLF				005			
				NONE	T.J. HILFERTY	COURSE AND MOLE PIER SITES (NO							
	ODIR/1330				CRWQCB	ENCLOSURE)							
	LTR			01.1	C. WALSH						SW02011001		
	NONE												
	00001												

UIC No. / Rec. No.		Proc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000325		06-12-1995		JACOBS		FINAL SOLID WASTE ASSESSMENT TEST	ADMIN RECORD	DISPOSAL	005	B2-B - BECHTEL	
CLE-001-01F041-12-		07-19-1991		ENGINEERING		PROPOSAL ADMIRAL BAKER GOLF		GW		NATIONAL	
B12-0001		00041		M.E. UNRUH		COURSE LANDFILL		MONITORING			
RPT		01.1		NAVFAC -				MW		SW02082311	
N68711-89-D-9296				SOUTHWEST				RI		IMAGED	
00127				DIVISION				SOIL		SDNS_004	
								SOIL BORING			
								SWAT			
								VOA			
								WATER			
N00245 / 000540		05-22-1996		PRC		DRAFT PUBLIC WORKS CENTER	ADMIN RECORD	BASIN	001	B2-B - BECHTEL	
		03-25-1992		ENVIRONMENTAL		RESOURCE CONSERVATION AND		RCRA	002	NATIONAL	
RPT		NONE		MGMT		RECOVERY ACT FACILITY ASSESSMENT		RFA	003	000-00-0000	
N62474-88-D-5086		01.1		R. JAIN		SITES 1, 2, 3, 4, 5 (EPA ID# CA6170024289)		SALVAGE YARD	004	SW02082315	
00128				US EPA -					005	IMAGED	
				WASHINGTON DC						SDNS_011	
N00245 / 000305		06-11-2002		PRC		FINAL PUBLIC WORKS CENTER	ADMIN RECORD	AIR	001	B2-B - BECHTEL	
R09039		04-21-1992		ENVIRONMENTAL		RESOURCE, CONSERVATION AND		CLOSURE	002	NATIONAL	
MISC		NONE		MGMT		RECOVERY ACT FACILITY ASSESSMENT		GW	003		
N62474-88-D-5086				R. JAIN		(EPA ID #CA6170024289)		HSWA	004	SW02082311	
00131				US EPA -				PCB	005	IMAGED	
				WASHINGTON, DC				PR	BLDG. 129	SDNS_010	
				F. MOORE				RCRA	BLDG. 132		
								RFA	BLDG. 3302		
								SOIL	BLDG. 3322		
								SWMU	BLDG. 65		
								TSCA	BLDG. 68		
								VSI			
								WATER			



UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000095					08-04-1994 02-01-1993 00198 01.1	JACOBS ENGINEERING D.W. VARCO NAVFAC - SOUTHWEST DIVISION	DRAFT SOLID WASTE ASSESSMENT TEST REPORT FOR THE ADMIRAL BAKER GOLF COURSE LANDFILL (SEE AR #241 - CRWQCB COMMENTS)	MISSING @ SWDIV	LF SWAT	005	SOUTHWEST DIVISION
N00245 / 000342					06-14-1995 04-17-1993 NONE 01.1	JACOBS ENGINEERING E.W. BANKS NAVFAC - SOUTHWEST DIVISION R. GREEN	SWAT SECOND QUARTERLY GROUNDWATER MONITORING REPORT, ADMIRAL BAKER GOLF COURSE, SITE NO. 5	ADMIN RECORD	SWAT	005	B2-B - BECHTEL NATIONAL SW02082312 IMAGED SDNS_004
N00245 / 000341					06-14-1995 07-17-1993 NONE 01.1	JACOBS ENGINEERING E.W. BANKS NAVFAC - SOUTHWEST DIVISION R. GREEN	SWAT THIRD QUARTERLY GROUNDWATER MONITORING REPORT ADMIRAL BAKER GOLF COURSE SITE NO. 5	ADMIN RECORD	SWAT	005	B2-B - BECHTEL NATIONAL SW02082312 IMAGED SDNS_010
N00245 / 000241					06-13-2001 07-29-1993 NONE	CRWQCB - SAN DIEGO M. ALPERT NAVSTA SAN DIEGO G. DOUGLAS	COMMENTS ON THE DRAFT SOLID WASTE ASSESSMENT TEST (SWAT) FOR THE ADMIRAL BAKER GOLF REFUSE DISPOSAL AREA (SEE AR #95 - DRAFT SWAT)	ADMIN RECORD	COMMENTS GW LF MW SOIL SWAT WATER WELLS	005	B2-B - BECHTEL NATIONAL SW02082309 IMAGED SDNS_005

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
Record Type	Contrl./Guid. No.	Record Date	Author	Recipient				
Approx. # Pages	EPA Cat. #	CTO No.						
N00245 / 000119	09-29-1994		JACOBS	FINAL SOLID WASTE ASSESSMENT TEST	ADMIN RECORD	GW	005	B2-B - BECHTEL NATIONAL
CLE-01-01F198-	10-08-1993		ENGINEERING	REPORT (SWAT) FOR THE ADMIRAL BAKER		LF		
B12-0002	00198		M. UNRUH	GOLF COURSE LANDFILL (SEE AR #242 -		METALS		
RPT	03.4		NAVFAC -	CRWQCB COMMENTS)		MONITORING		SW02082303
N68711-89-D-9296			SOUTHWEST			MW		IMAGED
00800			DIVISION			PCB		SDNS_002
						SOIL		
						SOIL BORING		
						SWAT		
						TIC		
						TRPH		
						UST		
						VOC		
						WATER		
						WELLS		
N00245 / 000242	06-13-2001		CRWQCB - SAN	COMMENTS ON THE FINAL SOLID WASTE	ADMIN RECORD	COMMENTS	005	B2-B - BECHTEL NATIONAL
NONE	12-23-1993		DIEGO	ASSESSMENT TEST REPORT (SWAT) FOR		LF		
LTR	NONE		M. ALPERT	THE ADMIRAL BAKER GOLF COURSE		MW		SW02082309
NONE			NAVSTA SAN	REFUSE DISPOSAL AREA (SEE AR #119 -		SWAT		IMAGED
00003			DIEGO	FINAL SWAT & #245 - RESPONSE TO		WATER		SDNS_005
			G. DOUGLAS	COMMENTS)		WELLS		
N00245 / 000243	06-13-2001		CRWQCB - SAN	OBSERVATIONS AND COMMENTS ON A	ADMIN RECORD	COMMENTS	005	B2-B - BECHTEL NATIONAL
NONE	12-23-1993		DIEGO	SITE VISIT OF THE ADMIRAL BAKER GOLF		LF		
LTR	NONE		M. ALPERT	COURSE LANDFILL (SEE AR #246 -		SOIL		SW02082309
NONE			NAVSTA SAN	RESPONSE TO THIS LETTER)		WATER		IMAGED
00002			DIEGO					SDNS_005
			G. DOUGLAS					

UIC No. / Rec. No.	Doc. Control No.	Record Type	Constr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	CTO No.	EPA Cat. #	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
N00245 / 000245	NAVSTASD SER	OD4/0554	LTR	N68711-89-D-9296	00006	06-13-2001	02-16-1994	00198	NAVSTA SAN	DIEGO	E. HUBBARD	CRWQCB - SAN	RESPONSE TO COMMENTS ON THE FINAL SOLID WASTE ASSESSMENT TEST REPORTS FOR THE ADMIRAL BAKER GOLF COURSE LANDFILL (SEE AR #242 - COMMENTS AND #369 - REVIEW OF THESE RESPONSES)	ADMIN RECORD	COMMENTS GW LF MONITORING MW RESPONSE SOIL SWAT WATER WELLS	005	B2-B - BECHTEL NATIONAL  SW02082309 IMAGED SDNS_005
N00245 / 000246	NAVSTASD SER	OD4/0947	LTR	NONE	00007	06-13-2001	03-23-1994	NONE	NAVSTA SAN	DIEGO	E. HUBBARD	CRWQCB - SAN	RESPONSE TO LETTER REGARDING OBSERVATIONS AND COMMENTS ON SITE VISIT TO THE ADMIRAL BAKER GOLF COURSE LANDFILL (SEE AR #243 - ORIGINAL LETTER)	ADMIN RECORD	LF METALS NFA RESPONSE SOIL SVOC SWAT TOC TRPH VOC WATER	005	B2-B - BECHTEL NATIONAL  SW02082309 IMAGED SDNS_005
N00245 / 000369	LTR	NONE	00002			07-25-1995	09-06-1994	NONE	CRWQCB SAN	DIEGO	J.P. ANDERSON	NAVSTA SAN	REVIEW OF RESPONSES TO COMMENTS ON THE DRAFT AND THE FINAL SOLID WASTE ASSESSMENT TEST REPORTS FOR THE ADMIRAL BAKER GOLF COURSE LANDFILL (SEE AR #245 - RESPONSES)	ADMIN RECORD	CLOSURE COMMENTS GW HAZMAT LF MW SWAT WATER WELLS	005	B2-B - BECHTEL NATIONAL  SW02082312 IMAGED SDNS_004

UIC No. / Rec. No.		Proc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Approx. # Pages	EPA Cat. #									CD No.	
N00245 / 000542		05-22-1996		NAVFAC -	NAVSTATION SAN DIEGO	ADMIN RECORD				B2-B - BECHTEL	
PLAN		05-01-1996		SOUTHWEST	PLAN NAVAL STATION SAN DIEGO			BASIN	001	NATIONAL	
		00071		DIVISION				DPDO	002		
N6871192D4670		11.6		R.M. SENG				SALVAGE YARD	003	000-00-0000	
00280				NAVSTA SAN					004	SW02082315	
				DIEGO					005	IMAGED	
									006	SDNS_009	
									007		
									008		
									009		
									010		
									011		
									012		
									013		
									014		
									015		
									016		
									017		
									018		
									019		
									020		
N00245 / 000683		04-22-1997		RWQCB SAN	APPROVAL OF REQUEST FOR NO	ADMIN RECORD		COMMENTS	005	BECHTEL	
LTR		03-06-1997		DIEGO	FURTHER ACTION (INCLUDES 2			NFA	006	NATIONAL	
		NONE		J. ROBERTUS	ENCLOSURES)			SOIL	011		
		01.6		NAVSTA SAN						SW02011022	
				DIEGO							
				T. MORLEY							
N00245 / 000006		08-24-1999		SAN DIEGO	RWQCB CONCURRENCE WITH NAVY'S	ADMIN RECORD		LF	005	B2-B - BECHTEL	
NONE		08-07-1997		RWQCB	NOVEMBER 21, 1996 REQUEST FOR NO			NFA		NATIONAL	
LTR		NONE		J. ANDERSON	FURTHER ACTION, IR SITES						
		01.6		NAVSTA SAN						SW02082301	
				DIEGO						IMAGED	
				T. MORLEY						SDNS_008	

UIC No. / Rec. No.			Prc. Date	Author Affil.	Subject		Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Constr./Guid. No.	Record Date	Author	Recipient Affil.					Box No.	FRC Access. No.
Approx. # Pages	EPA Cat. #		CTO No.	Recipient						CD No.	
N00245 / 000183	08-09-2000			BECHTEL		DRAFT RECORD OF DECISION/REMEDIAL ACTION PLAN (ROD/RAP) FOR NO ACTION SITES	ADMIN RECORD	COC	005	B2-B - BECHTEL	
CTO-0190/0022	12-01-1999			NATIONAL INC.				GW	011	NATIONAL	
PLAN	00190							IAS	BLDG. 3053		
N68711-92-D-4670				NAVFAC - SOUTHWEST DIVISION				LF	BLDG. 3149	SW02082308	
00129								MW		IMAGED	
								NFA		SDNS_003	
								PCB			
								PRG			
								PVC			
								RAB			
								RAP			
								RCRA			
								REMEDIAL ACTIO			
								ROD			
								SOIL			
								SVOC			
								SWAT			
								SWMU			
								TPH			
								TRPH			
								UST			
								VOC			
N00245 / 000900	08-06-2002			NAVY REGION		STORM WATER POLLUTION PREVENTION PLAN FOR THE ADMIRAL BAKER FIELD LANDFILL - NAVAL RECREATION FACILITY, MISSION GORGE	ADMIN RECORD	CLOSURE	005	P3-C - BECHTEL	
NONE	04-29-2002			SW - WATER PROGRAM				GW		NATIONAL	
PLAN	NONE			B. GORDON				LF			
NONE				CRWQCB - SAN DIEGO				MONITORING		SW03061201	
00013								SEDIMENTS		IMAGED	
								SOIL		SDNS_012	
								STORMWATER			
								SWPPP			

UIC No. / Rec. No.	Doc. Control No.	Record Type	Prc. Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
			Record Date									Box No.
			CTO No.									CD No.
Approx. # Pages			EPA Cat. #									
N00245 / 000899			08-06-2002	NAVY REGION				SEMI-ANNUAL/ANNUAL REPORT FOR POST-CLOSURE MAINTENANCE AT THE ADMIRAL BAKER GOLF COURSE/ADMIRAL BAKER FIELD LANDFILL - NAVAL RECREATION FACILITY MISSION GORGE (INCLUDES SWDIV TRANSMITTAL LETTER FROM B. GORDON)	ADMIN RECORD	CLOSURE GW LF MONITORING SOIL	005	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012
N00245 / 000901			08-06-2002	NAVY REGION				POST-CLOSURE MAINTENANCE REPORT AT THE ADMIRAL BAKER FIELD LANDFILL - NAVAL RECREATION FACILITY MISSION GORGE (INCLUDES SWDIV TRANSMITTAL LETTER FROM B. GORDON)	ADMIN RECORD	CLOSURE GW LF MONITORING MW SOIL SWAT WELLS	005	BECHTEL NATIONAL  BNI - 05/19/03
N00245 / 000902			08-23-2002	NAVFAC -				TRANSMITTAL OF SECTION 5 OF THE DRAFT ECOLOGICAL RISK ASSESSMENT FOR THE FORMER SEWAGE TREATMENT PLANT AND THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE LANDFILL, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	ARSENIC ERA GW LANDFILL METALS NFA PA PAH PCB PIM PROPOSED PLAN REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC TPH VOC	005 007 011 012	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012
CTO-0190/0151 & SWDIV SER 5SEN.DB/174 MISC N68711-92-D-4670 00134			08-15-2002 00190	SOUTHWEST DIVISION D. BELTON DTSC - CYPRESS D. BAUTISTA								

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000919	NONE	MISC	NONE	00002	10-16-2002 08-29-2002 NONE	SAN DIEGO UNION-TRIBUNE GENERAL PUBLIC	NOTICE INVITING PUBLIC COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	COMMENTS GW HAZ MAT NFA PROPOSED PLAN REMOVAL RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
N00245 / 000903	NONE	MISC	NONE	00003	09-11-2002 08-30-2002 NONE	THE STAR-NEWS GENERAL PUBLIC	PROOF OF PUBLICATION OF PROPOSED PLAN RELEASED FOR PUBLIC COMMENT FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS ERA GW NFA PA PROPOSED PLAN PUBNOT REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC VOC WATER	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
N00245 / 000918	NONE	MISC	NONE	00001	10-16-2002 08-31-2002 NONE	EL MEXICANO GENERAL PUBLIC	PUBLIC NOTICE COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	CLOSURE COMMENTS GW HAZ MAT NFA PROPOSED PLAN PUBNOT RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012





UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	CTO No.	EPA Cat. #	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
																	FRC Access. No. Box No. CD No.
N00245 / 000912	CTO-0013/0122	PLAN	N68711-95-D-7526	00017	09-17-2002	09-26-2002	00013		BECHTEL ENVIRONMENTAL, INC.				PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA - NAVY PROPOSES NO FURTHER ACTION (WRITTEN IN BOTH ENGLISH AND SPANISH)	ADMIN RECORD INFO REPOSITORY	AIR ARSENIC BGS CANCER GW LF METALS NCP NFA PA PAH PCB PROPOSED PLAN REMEDIAL ACTIO RI ROD RSE SI SOIL SOLVENTS SVOC TPH VOC WATER	005 007 011 012 BLDG. 3053	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
N00245 / 000923	NONE	MISC	NONE	00004	10-24-2002	10-07-2002	NONE		LEE & ASSOCIATES N. LEE				TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON-CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012

UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification		Keywords		Sites		Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient									FRC Access, No. Box No.	CD No.
Contri./Guid. No.	Approx. # Pages	EPA Cat. #													
N00245 / 000936		12-05-2002		NAVFAC - SOUTHWEST DIVISION		SEMI-ANNUAL/ANNUAL REPORT FOR POST- CLOSURE MAINTENANCE AT THE ADMIRAL BAKER FIELD LANDFILL, NAVAL RECREATION FACILITY MISSION GORGE		ADMIN RECORD		CLOSURE GW LF MW SI WATER WELLS		005		P3-C - BECHTEL NATIONAL	
DON SW SER N45RI.TM/0333		11-20-2002	NONE	T. MORLEY										SW03061202 IMAGED SDNS_012	
RPT NONE 00013				RWQCB - SAN DIEGO B. MCDANIEL											
N00245 / 000947		03-20-2003		NAVFAC - SOUTHWEST DIVISION		LETTER IN RESPONSE TO DTSC'S LETTER OF 16 SEPTEMBER 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP SITE 7		ADMIN RECORD INFO REPOSITORY				005 007 011 012		P3-C - BECHTEL NATIONAL	
SWDIV SER N46MS/0048		01-14-2003	NONE	D. KEMP DTSC - CYPRESS J. SCANDURA										SW03061202 IMAGED SDNS_012	
LTR NONE 00004															
N00245 / 000972		06-05-2003		NAVY REGION SOUTHWEST ENV		SEMI-ANNUAL/ANNUAL REPORT FOR POST- CLOSURE MAINTENANCE AT THE ADMIRAL BAKER FIELD LANDFILL - NAVAL RECREATION FACILITY MISSION GORGE (INCLUDES SWDIV TRANSMITTAL LETTER FROM B. GORDON)		ADMIN RECORD		LANDFILL		005		P3-C - BECHTEL NATIONAL	
SWDIV SER N45JB/0150		04-30-2003	NONE	T. MORLEY										SW03072101 - PACKAGE IMAGED SDNS_012	
RPT NONE 00016				NAVFAC - SOUTHWEST DIVISION										CHOICE IMAGING SOLUTIONS	
N00245 / 001074		06-21-2004				DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), [INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTON]		ADMIN RECORD		BTEX PAH PCB PLAN SVOC TPH VOC		005 007 011 012			
SWDIV SER. 5SEN.DB/149		06-01-2004	NONE	NAVFAC - SOUTHWEST DIVISION										SW04071501	
PLAN NONE 00200															
N00245 / 001080		08-23-2004		RWQCB L. WALSH		NO COMMENTS ON THE NO FURTHER ACTION RECORD OF DECISION (ROD)		ADMIN RECORD		COMMENTS		005 007 011 012		SOUTHWEST DIVISION	
NONE		08-22-2004	NONE	NAVFAC - SOUTHWEST DIVISION											
MISC NONE 00001				D. BELTON											

UIC No. / Rec. No.		Prc. Date		Author Affil.		Location	
Doc. Control No.	Record Type	Record Date	Author	Record Date	Author	FRC Access. No.	Box No.
Contr./Guid. No.	Approx. # Pages	EPA Cat. #	Recipient	Record Date	Recipient	CD No.	CD No.
		Subject		Classification		Keywords	
		Sites					

Total Estimated Record Page Count: 2,863

Total - Administrative Records: 37

((SUBJECT Like "ACTION" Or SUBJECT Like "ASSESSM" Or SUBJECT Like "ARAR" Or SUBJECT Like "APPROPRIATE" Or SUBJECT Like "CHARACTERIZ" Or SUBJECT Like "CLOSURE" Or SUBJECT Like "FACILITY" Or SUBJECT Like "INVESTIG" Or SUBJECT Like "RESTORATION PROGRAM PLAN" Or SUBJECT Like "MONITORING" Or SUBJECT Like "NFA" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESULT" Or SUBJECT Like "RESPONSE" Or SUBJECT Like "SITE" Or SUBJECT Like "WORK PLAN" Or SUBJECT Like "RIFS" Or SUBJECT Like "FEASIBILITY STUDY" Or SUBJECT Like "COMMENTS" Or SUBJECT Like "RCRA" Or SUBJECT Like "RECOVERY ACT" Or SUBJECT Like "HAZARD RANK" Or SUBJECT Like "INSPECTION" Or SUBJECT Like "SAMPLING" Or SUBJECT Like "REMEDIES" Or SUBJECT Like "REMEDY" Or SUBJECT Like "SOIL" Or SUBJECT Like "GROUNDWATER" Or SUBJECT Like "AIR" Or SUBJECT Like "PCBS" Or SUBJECT Like "EBS" Or SUBJECT Like "BASELINE" Or SUBJECT Like "QUALITY" Or SUBJECT Like "BACKGR" Or SUBJECT Like "PILOT" Or SUBJECT Like "CONSTR" Or SUBJECT Like "CONTINGENCY" Or SUBJECT Like "REMOVAL" AND (UIC NUMBER=N00245

No Keywords

Sites=005

No Classification







NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

TECHNICAL DOCUMENTS FOR SITE 7

UIC No. / Rec. No.	Doc. Control No.	Record Type	Prc. Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
	Constr./Guid. No.	Approx. # Pages	CTO No.									FRC Access. No. Box No. CD No.
N00245 / 000089			08-04-1994	MARTIN				FINAL PRELIMINARY ASSESSMENT LETTER REPORT, DATED SEPTEMBER 1989	ADMIN RECORD	PA	007 008	B2-B - BECHTEL NATIONAL
RPT			09-01-1989	MARIETTA								
NONE			NONE	ENERGY								SW02082302
00141			01.0	SYSTEMS								IMAGED SDNS_010
N00245 / 000104			09-29-1994	MARTIN				FINAL DRAFT SITE INSPECTION (SI) WORK PLAN	ADMIN RECORD	DPDO	002 003 004 007 PARCEL B	B2-B - BECHTEL NATIONAL
RPT			11-01-1989	MARIETTA								
DEAC05840R21400			NONE	NAVFAAC -								SW02082302
00233			01.2	SOUTHWEST								IMAGED SDNS_001
N00245 / 000007			05-26-1994	NAVFAAC -				RESPONSE TO REQUEST FOR FURTHER INFORMATION TO CHARACTERIZE NAVSTA FOR SCREENING SITE INSPECTION, SWA FOR A POTENTIAL RELEASE	ADMIN RECORD	BASIN DPDO IAS SWAT	001 002 003 004 005 007 008	BECHTEL NATIONAL
SWDIV 5090			07-13-1990	SOUTHWEST								
1812.RB/5554E			NONE	DIVISION								
SER 04881			01.0	DANA N.								SW02011001
LTR				SAKAMOTO								
NONE				EPA								
00002				CAROLYN								
				DOUGLAS								
N00245 / 000097			08-04-1994	MARTIN				FINAL SITE INSPECTION (SI) WORK PLAN DATE OCTOBER 1990 (SEE AR #16 - COMMENTS)	ADMIN RECORD	DPDO	002 003 004 007 008	B2-B - BECHTEL NATIONAL
NONE			10-05-1990	MARIETTA						SALVAGE YARD SI		
PLAN			NONE									
DE-AC05-			01.2	NAVFAAC -								SW02082302
840R21400				SOUTHWEST								IMAGED SDNS_001
00248				DIVISION								

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Record Type	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
	Constr./Guid. No.	Approx. # Pages	CTO No.	EPA Cat. #									Box No. CD No.
N00245 / 000298	NONE		05-26-1995		IT CORPORATION				FINAL SITE INSPECTION REPORT FOR SITES 2,3,4,7, & 8 - INCLUDES VARIOUS LETTERS AND TABLES & RESPONSE TO COMMENTS ON THE PRELIMINARY DRAFT SITE INSPECTION REPORT (SEE AR #609, 650 THROUGH #653 & #659 - FOR COMMENTS)	ADMIN RECORD	DPDO SALVAGE YARD SI	002 003 004 007 008	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_010
N00245 / 000032	PROJECT NO. 94510204-SI01		07-11-1994		WOODWARD CLYDE				RESULTS OF ANALYTICAL LABORATORY TESTING, PARKING LOT L-116 EAST OF & ADJACENT TO BLDG 116	ADMIN RECORD	DATA	007	B2-B - BECHTEL NATIONAL
N63387-93-D-5286	DATA		02.2		J. MICHALOWSKI								SW02082301 IMAGED SDNS_008
N00245 / 000528	PLAN		05-10-1996		BECHTEL NATIONAL INC				PRELIMINARY FINAL WORK PLAN REMOVAL SITE EVALUATION AT SITES 1 AND 7	ADMIN RECORD	BASIN REMOVAL	001 007	P3-C - BECHTEL NATIONAL
N6871192D4670			03.3		J.S. HOYLE								SW02112101 IMAGED SDNS_012
N00245 / 000458	LTR		11-28-1995		DTSC LONG BEACH				RESPONSE TO REQUEST FOR APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)	ADMIN RECORD	ARAR DPDO SALVAGE YARD	001 002 003 004 007 008 010 011 012 013	BECHTEL NATIONAL SW02011016
N00245 / 000468	LTR		02-08-1996		DTSC LONG BEACH				COMMENTS ON PRELIMINARY FINAL WORK PLAN REMOVAL SITE EVALUATION SITE 1 AND 7	ADMIN RECORD	BASIN COMMENTS	001 007	B2-B - BECHTEL NATIONAL
NONE			11-21-1995		G. HOLMES								SW02082314 IMAGED SDNS_004

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
N00245 / 000462	01-10-1996 11-22-1995	CRWQCB SAN DIEGO J.P. ANDERSON NAVSTA SAN DIEGO T. MORLEY	COMMENTS ON THE PRELIMINARY FINAL WORK PLAN REMOVAL SITE EVALUATION FOR SITES 1 AND 7
LTR NONE 00001	00061 01.6		ADMIN RECORD BASIN COMMENTS
			001 007
			B2-B - BECHTEL NATIONAL
			SWD2082314 IMAGED SDNS_004
N00245 / 000478	02-22-1996 11-22-1995	BECHTEL NATIONAL, INC.	RESPONSE TO COMMENTS ON THE PRELIMINARY FINAL WORK PLAN FOR REMOVAL SITE EVALUATION (SEE AR #462 - CRWQCB COMMENTS, #468 - DTSC COMMENTS, #528 - PRELIMINARY FINAL WORK PLAN, & #482 - REVISED PAGES FOR RESPONSE TO COMMENTS)
MISC N68711-92-D-4670 00014	00061 01.6	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD COMMENTS REMOVAL RESPONSE RSE WORK PLAN
			001 007
			B2-B - BECHTEL NATIONAL
			SWD2082314 IMAGED SDNS_011

Monday, September 13, 2004

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Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	Classification
			Keywords
			Sites
N00245 / 000482	02-22-1996	BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
CTO-0061/0144	02-13-1996		
MISC	00061		
N68711-92-D-4670	03.6	NAVFAC - SOUTHWEST DIVISION	SW02082314 IMAGED SDNS_011
00033			
N00245 / 000516	04-24-1996	NAVSTA SAN DIEGO	B2-B - BECHTEL NATIONAL
LTR	02-15-1996	L.L. MCLAUGHLIN	000-00-0000
NONE	NONE	DTSC LONG BEACH	SW02082315 IMAGED SDNS_011
00002	01.6	S. LOWE	
N00245 / 000387	03-19-2002	DTSC, LONG BEACH, CA	B2-B - BECHTEL NATIONAL
NONE	04-24-1996	J. JIMENEZ	
LTR	NONE	NAVFAC - SOUTHWEST DIVISION	SW02082313 IMAGED SDNS_010
00005		T. MORLEY	
		DTSC COMMENTS TO THE NAVY'S RESPONSES TO RAB COMMENTS	C&D RAB
		ADMIN RECORD	
		REQUESTED MODIFICATIONS TO THE FINAL WORK PLAN REMOVAL SITE EVALUATION AND PRELIMINARY FINAL COMMENT RESOLUTION MATRIX (SEE AR #477 - FINAL RSE WORK PLAN, & #478 - RESPONSE TO COMMENTS ON PRE-FINAL WORK PLAN)	BASIN REMOVAL RSE
		TRANSMITTAL OF REVISED TEXT FOR THE REMOVAL SITE EVALUATION WORK PLAN AT SITES 1 & 7 W/O ENCLOSURE (SEE AR #482 - REVISED TEXT)	001 007

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000542		05-22-1996 05-01-1996	NAVFAC - SOUTHWEST DIVISION			INSTALLATION RESTORATION PROGRAM PLAN NAVAL STATION SAN DIEGO	ADMIN RECORD	BASIN DPDO SALVAGE YARD	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_009
PLAN N6871192D4670 00280		00071 11.6	R.M. SENG NAVSTA SAN DIEGO							
N00245 / 000568		08-02-1996 05-23-1996	DTSC LONG BEACH			COMMENTS ON THE PRELIMINARY FINAL WORK PLAN FOR THE REMOVAL SITE EVALUATION SITES 1 AND 7 (W/ENCL.)	ADMIN RECORD	COMMENTS RA WORK PLAN	001 007	B2-B - BECHTEL NATIONAL
LTR NONE 00006		NONE 02.7	J.JIMENEZ NAVSTA SAN DIEGO CO/T. MORLEY							SW02082316 IMAGED SDNS_005
N00245 / 000725		07-31-1997 05-17-1997	BECHTEL NATIONAL, INC.			AMENDMENT TO THE FINAL WORK PLAN REMOVAL SITE EVALUATION FOR SITE 7 (SEE AR #477 - FINAL RSE)	ADMIN RECORD	QAPP REMOVAL RSE WORK PLAN	007	B2-B - BECHTEL NATIONAL
CTO-0145/0003 PLAN N68711-92-D-4670 00022		00145 02.0	J. BAILEY NAVFAC - SOUTHWEST DIVISION							SW02082318 IMAGED SDNS_011

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	Classification
			Keywords
			Sites
N00245 / 000737	09-18-1997	BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
CTO-0116/0102	07-16-1997	J. BAILEY	
XMTL	00116	NAVFAC - SOUTHWEST DIVISION	
N68711-92-D-4670	02.0		SDW02082319 IMAGED SDNS_011
00130			
N00245 / 000745	11-13-1997	BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
CTO-0116/0112	08-28-1997	T. HEIRONIMUS	
PLAN	00116	NAVFAC - SOUTHWEST DIVISION	
N68711-92-D-4670	02.1		SDW02082319 IMAGED SDNS_011
00054			
N00245 / 000742	11-13-1997	BECHTEL NATIONAL INC	B2-B - BECHTEL NATIONAL
CTO-0145/0035	09-09-1997	K. PARKER	
RPT	00145	NAVFAC - SOUTHWEST DIVISION	
N68711-92-D-4670	01.1		SDW02082319 IMAGED SDNS_005
01339			
N00245 / 000773	03-05-1998	DTSC LONG BEACH	B2-B - BECHTEL NATIONAL
FAX	09-24-1997	G. SWEEL	000-00-0000 SDW02082320 IMAGED SDNS_008
NONE	NONE		
00005	10.1	R. BASINETT	
N00245 / 000750	11-26-1997	BECHTEL NATIONAL INC	B2-B - BECHTEL NATIONAL
CTO-0145/0055	09-26-1997	J. BAILEY	
RPT	00145	VARIOUS AGENCIES	
N68711-92-D-4670	01.4		SDW02082319 IMAGED SDNS_005
01401			

Monday, September 13, 2004

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UIC No. / Rec. No.		Prc. Date	Author Affil.		Location	
Doc. Control No.	Record Type	Record Date	Author	Recipient	FRC Access. No.	Box No.
Contr./Guid. No.	CTO No.	CTO No.	Recipient	Subject	Classification	Keywords
Approx. # Pages	EPA Cat. #					Sites
N00245 / 000774	03-05-1998	09-30-1997	CRWQCB SAN DIEGO	COMMENTS ON THE PRELIMINARY FINAL AMENDMENT TO THE FIELD SAMPLING PLAN RSE & AMENDMENT TO FINAL QAPP FOR SITES 1 AND 7	ADMIN RECORD	COMMENTS QAPP RSE SOIL
LTR	NONE		L. WALSH			001
NONE	10.1		VARIOUS AGENCIES			007
00001						B2-B - BECHTEL NATIONAL 000-00-0000 SW02082320 IMAGED SDNS_008
N00245 / 000741	11-13-1997	10-08-1997	BECHTEL NATIONAL, INC.	FINAL AMENDMENT TO THE QUALITY ASSURANCE PROJECT PLAN & FIELD SAMPLING PLAN, FINAL REMOVAL SITE EVALUATION WORK PLAN FOR SITES 1 & 7; INCLUDES RESPONSES TO COMMENTS ON PRELIMINARY FINAL AMENDMENT TO QAPP & FSP (SEE AR #477 - FINAL RSE WORK PLAN)	ADMIN RECORD	COMMENTS FSP QAPP REMOVAL RESPONSE RSE SAP
CTO-0116/0119	00116		T. HEIRONIMUS			001
PLAN			NAVAFAC - SOUTHWEST DIVISION			007
N68711-92-D-4670	03.3					SW02082319 IMAGED SDNS_011
00056						
N00245 / 000749	11-26-1997	11-12-1997	BECHTEL NATIONAL INC	CLARIFICATION OF REMAINING OPEN ISSUES REGARDING FINAL BACKGROUND STUDY REPORT FROM THE OCTOBER 29, 1997 CONFERENCE CALL (SEE AR #627 - FINAL BACKGROUND STUDY REPORT)	ADMIN RECORD	BACKGROUND COMMENTS
CTO-0099/0127	00099		J. BAILEY			002
MISC			VARIOUS AGENCIES			003
N68711-92-D-4670	10.1					007
00012						008
						B2-B - BECHTEL NATIONAL SW02082319 IMAGED SDNS_008
N00245 / 000779	03-06-1998	12-03-1997	DTSC LONG BEACH	COMMENTS ON PRELIMINARY FINAL REMOVAL SITE EVALUATION REPORT SITE 7	ADMIN RECORD	COMMENTS EVALUATION IR
LTR	NONE		D. BAUTISTA			007
NONE	10.1		NAVSTA SAN DIEGO			000-00-0000 SW02082320 IMAGED SDNS_008
00014			T. MORLEY			
N00245 / 000785	03-06-1998	12-16-1997	NAVAFAC - SOUTHWEST DIVISION	DECEMBER 16, 1997, PROJECT REVIEW MEETING MINUTES, NOVEMBER 20, 1997, MONTHLY STATUS MEETING MINUTES, AND APPROACH FOR ADDITIONAL SOIL SAMPLING	ADMIN RECORD	MTG MINS
MM	NONE					001
NONE	10.4		MEMBERS			004
00006						007
						012
						B2-B - BECHTEL NATIONAL 000-00-0000 SW02082320 IMAGED SDNS_008

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
N00245 / 000786	03-06-1998	NAVFAC - SOUTHWEST DIVISION	004
	12-23-1997	PROJECT REVIEW MEETING SITE 4 AND COMMENTS OF DECEMBER 3, 1997 ON SITE 7 PRE-FINAL REMOVAL SITE EVALUATION REPORT	007
	NONE	E. DIAS	B2-B - BECHTEL NATIONAL
	01.6	VARIOUS AGENCIES	000-00-0000 SW02082320 IMAGED SDNS_008
N00245 / 000826	12-04-1998	CRWQCB SAN DIEGO	007
	12-30-1997	RSE REPORT, SITE 7 - CONCURRENCE WITH DTSC COMMENTS AND NO SUPPORT OF NO FURTHER ACTION RECOMMENDATION	B2-B - BECHTEL NATIONAL
	NONE	L. WALSH	DATA
	01.6	NAVSTA SAN DIEGO	GW NFA RSE
N00245 / 00001		T. MORLEY	007
		REMOVAL SITE EVALUATION, AND QUALITY ASSURANCE PROJECT PLAN ADDENDUM LETTER TO FINAL WORK PLAN RSE, SITE 7 (SEE AR #477 - FINAL RSE WORK PLAN)	007
		BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
		J. BAILEY	SW02082303 IMAGED SDNS_011
N00245 / 000124	09-23-1999	BECHTEL NATIONAL, INC.	007
	02-23-1998	REMOVED SITE EVALUATION, AND QUALITY ASSURANCE PROJECT PLAN ADDENDUM LETTER TO FINAL WORK PLAN RSE, SITE 7 (SEE AR #477 - FINAL RSE WORK PLAN)	007
	00145	J. BAILEY	DATA
	03.3	NAVSTA SAN DIEGO	MONITORING
N00245 / 000837	12-07-1998	BECHTEL NATIONAL, INC.	001
	02-26-1998	REVISED FINAL AMENDMENT TO QUALITY ASSURANCE PROJECT PLAN, REMOVAL SITE EVALUATION, SITES 1 AND 7 (SEE AR #477 - FINAL RSE WORK PLAN)	007
	00096	J. BAILEY	B2-B - BECHTEL NATIONAL
	01.1	NAVSTA SAN DIEGO	SW02082321 IMAGED SDNS_011
N00245 / 000838	12-07-1998	BECHTEL NATIONAL, INC.	001
	02-26-1998	REVISED FINAL AMENDMENT TO FINAL FIELD SAMPLING PLAN, REMOVAL SITE EVALUATION, SITES 1 & 7 (SEE AR #477 - FINAL RSE WORK PLAN)	007
	00096	J. BAILEY	B2-B - BECHTEL NATIONAL
	01.1	NAVSTA SAN DIEGO	000-00-0000 SW02082321 IMAGED SDNS_011

Monday, September 13, 2004

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JIC No. / Rec. No.		Prc. Date	Author Affil.		Location	
Doc. Control No.	Record Type	Record Date	Author	Recipient	FRC Access. No.	Box No.
Constr./Guid. No.	CTO No.	CTO No.				CD No.
Approx. # Pages	EPA Cat. #			Subject	Classification	Keywords
						Sites
N00245 / 000832	12-07-1998	03-06-1998	BECHTEL NATIONAL, INC.	FINAL ADDENDUM LETTER TO FINAL WORK PLAN REMOVAL SITE EVALUATION, SITE 7 AND QUALITY ASSURANCE PROJECT PLAN ADDENDUM LETTER TO FINAL WORK PLAN RSE, SITE 7 (SEE AR #477 - FINAL RSE WORK PLAN)	ADMIN RECORD	MONITORING
PLAN	00145		J. BAILEY			QAPP
N68711-92-D-4670	03.3		NAVFAC - SOUTHWEST DIVISION			RSE
00051			C. HERNANDEZ			SOIL
						WELLS
						WORK PLAN
N00245 / 000848	12-07-1998	07-23-1998	NAVSTA SAN DIEGO	JULY 23, 1998 PROJECT REVIEW MEETING AGENDA WITH JUNE 18, 1998 PROJECT REVIEW MEETING MINUTES & RESPONSE TO DTSC COMMENTS ON DRAFT PROJECT CLOSURE REPORT, SITE 3	ADMIN RECORD	CLOSURE
MISC	NONE		L. MC LAUGHLIN			COMMENTS
NONE	10.1		DTSC CYPRESS			MTG MINS
00007			D. BAUTISTA			RESPONSE
						RSE
						007
						010
						012
						013
N00245 / 000849	12-07-1998	07-24-1998	BECHTEL NATIONAL INC	HANDOUTS FROM PCB CONTAMINATED SOIL TREATABILITY STUDY - KICK OFF MEETING HELD ON JULY 21, 1998	ADMIN RECORD	PCB
MISC	00145		J. BAILEY			SOIL
N6871192D467000	01.1		VARIOUS AGENCIES			TCE
0032						007
						B2-B - BECHTEL NATIONAL
						000-00-0000
						SW02082321
						IMAGED
						SDNS_010
N00245 / 000853	12-07-1998	08-21-1998	BECHTEL NATIONAL INC	FINAL - REMOVAL SITE EVALUATION REPORT, VOLUMES 1 AND 2	ADMIN RECORD	DATA
CTO-0145/0091	00145		J. BAILEY			GW
RPT	00145		NAVFAC - SOUTHWEST DIVISION			MONITORING
N68711-92-D-4670	03.4		C. HERNANDEZ			NFA
1777						PCB
						RSE
						SOIL
						WELLS
						007
						B2-B - BECHTEL NATIONAL
						000-00-0000
						SW02082322
						IMAGED
						SDNS_010
N00245 / 000889	01-01-2000	08-27-1998	NAVSTA SAN DIEGO	NO FURTHER REMEDIAL ACTION PLANNED	ADMIN RECORD	NFA
MISC	NONE		L. MC LAUGHLIN			
NONE	03.6		D. BAUTISTA			
0001			DTSC			
						B2-B - BECHTEL NATIONAL
						000-00-0000
						SW02082322
						IMAGED
						SDNS_004

UIC No. / Rec. No.	Pr. Date	Author Affil.	Location
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Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000856	12-07-1998 09-08-1998	DTSC CYPRESS S. LOWE	007 B2-B - BECHTEL NATIONAL
LTR	NONE	NAVSTA SAN DIEGO	000-00-0000
NONE	01.6	L. MCLAUGHLIN	SW02082322
0003		DTSC REVIEW OF PRELIMINARY FINAL REMOVAL SITE EVALUATION REPORT FOR THE FORMER SEWAGE TREATMENT PLANT - DTSC DOES NOT CONCUR WITH NO FURTHER ACTION FOR SITE AND RECOMMENDS REMEDIAL INVESTIGATION/ FEASIBILITY STUDY	IMAGED SDNS_004
N00245 / 000227	05-14-2001 08-31-1999	NAVFAC - SOUTHWEST DIVISION	007 B2-B - BECHTEL NATIONAL
SWDIV/SER		K. BEVERLY	009
65EN/KB/310-315	NONE	VARIOUS AGENCIES	
LTR		VARIOUS TREATMENT PLANT AND PWC STORAGE YARD	
NONE		PRELIMINARY FINAL - CORRELATION OF SEDIMENT STUDY TO INSTALLATION RESTORATION PROGRAM SITES	
00051		ADMIN RECORD INFO REPOSITORY	
N00245 / 000133	10-26-1999 09-23-1999	BECHTEL NATIONAL INC	001 B2-B - BECHTEL NATIONAL
CTO-0169/0144		J. BAILEY	002
RPT	00169	NAVFAC - SOUTHWEST DIVISION	003
N68711-92-D-4670	01.1		004
00291			007
			008
			009
			010
			011
			012
			013
			020

Monday, September 13, 2004

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Approx. # Pages	EPA Cat. #	CTO No.	Recipient					Box No.
								CD No.
N00245 / 000906	09-12-2002	08-01-2000	NAVY PUBLIC WORKS CENTER - SD	SITE ASSESSMENT REPORT - FORMER BUILDING 173	ADMIN RECORD	ASSESSMENT	003	BECHTEL NATIONAL
030	NONE		S. VAN WINKLE			DATA	007	
RPT			NAVSTA SAN DIEGO			FUEL	010	
NONE						GW	BLDG. 173	BNI - 05/19/03
00250						H&SP	UST 173A	
						MONITORING	UST 173B	
						MW	UST 173C	
						SOIL	UST 173D	
						SOIL BORING		
						TPH		
						UST		
						WELLS		
						WORK PLAN		
N00245 / 000218	10-19-2000	09-29-2000	BECHTEL NATIONAL, INC.	FINAL CORRELATION OF SEDIMENT STUDY TO INSTALLATION RESTORATION PROGRAM SITES DATED SEPTEMBER 2000	ADMIN RECORD	IRP	001	B2-B - BECHTEL NATIONAL
CTO-0169/0268	00169		P. STANG		INFO	PAH	002	
RPT			NAVFAAC - SOUTHWEST DIVISION		REPOSITORY	PCB	003	
N68711-92-D-4670						RCRA	004	SW02082308
00323						RFI	007	IMAGED
						SITE	008	SDNS_003
						SWMU	009	
						TPH	010	
						UST	011	
							012	
							013	
							020	
N00245 / 000659	11-08-1996	01-01-2001	NAVSTA SAN DIEGO	RESPONSE TO AGENCY'S CONCERN REGARDING THEIR COMMENTS ON THE DRAFT SITE INSPECTION REPORT FOR SITES 2,3,4,7, & 8 {SEE AR #298 - FINAL SITE REPORT}	ADMIN RECORD	COMMENTS	002	B2-B - BECHTEL NATIONAL
NONE	NONE		G. DOUGLASS			DPDO	003	
LTR	10.1		CRWQCB SAN DIEGO			SI	004	
NONE							007	SW02082317
00001			D. BARKER				008	IMAGED
								SDNS_010

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Recipient Affil.	Box No.
Approx. # Pages	EPA Cat. #	Recipient	CD No.
Subject			
Classification			
Keywords			
Sites			
N00245 / 000249	07-11-2001	BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
CTO-0190/0083	07-02-2001	K. COLLINS	
PLAN	00190	NAVFAC - SOUTHWEST DIVISION	
N68711-92-D-4670			SW02082309 IMAGED SDNS_006
00015			
N00245 / 000252	08-15-2001	BECHTEL NATIONAL, INC.	B2-B - BECHTEL NATIONAL
CTO-0190/0089	08-02-2001	K. COLLINS	
PLAN	00190	NAVFAC - SOUTHWEST DIVISION	
N68711-92-D-4670			SW02082309 IMAGED SDNS_007
00015			
N00245 / 000251	08-29-2001	CRWQCB - SAN DIEGO	B2-B - BECHTEL NATIONAL
NONE	08-20-2001	L. WALSH	
LTR	NONE	NAVFAC - SOUTHWEST DIVISION	
NONE			SW02082309 IMAGED
00001		T. MORLEY	SDNS_007

Monday, September 13, 2004

This Administrative Record (AR) index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.	Prc. Date	Author Affil.	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location
Doc. Control No.	Record Type	Record Date	CTO No.	EPA Cat. #	Recipient				FRC Access. No. Box No. CD No.
Approx. # Pages									
N00245 / 000792	05-03-2002	LEE & ASSOCIATES	IR SITES 4 AND 7 W/AGENDA	ADMIN RECORD	COPC	004	B2-B - BECHTEL NATIONAL		
NONE	02-04-2002	N. LEE		INFO	GC/MS	007	000-00-0000		
MM	NONE	NAVFAC - SOUTHWEST DIVISION		REPOSITORY	GW	BLDG. 250	SW02082320		
NONE		D. BELTON			METALS		IMAGED		
00168					MTG MINS		SDNS_011		
					PESTICIDES				
					PRG				
					RI				
					RISK				
					RSE				
					SOIL				
					SOIL BORING				
					WELLS				
					GW	007	BECHTEL NATIONAL		
					MW	012	NATIONAL		
					SITE ASSESMEN				
					WELLS		SW02031801		
N00245 / 000350	03-05-2002	BECHTEL NATIONAL, INC.	FIELD RECORDS AND SCALED PLANS FOR THE DESTRUCTION OF EIGHT MONITORING WELLS AT THE SEWAGE TREATMENT PLANT AND BRINSER STREET PARKING AREA	ADMIN RECORD					
CTO-0196/0094	02-21-2002								
MISC	00196	COUNTY OF SD - ENVIRON. HEALTH							
N68711-92-D-4670									
00018									
N00245 / 000351	03-05-2002	BECHTEL NATIONAL, INC.	NOTIFICATION OF OPTIONS FOR DISPOSAL OF INVESTIGATION DERIVED WASTE GENERATED DURING THE DESTRUCTION OF EIGHT MONITORING WELLS AT THE SEWAGE TREATMENT PLANT AND BRINSER STREET PARKING AREA	ADMIN RECORD	DISPOSAL	007	B2-B - BECHTEL NATIONAL		
CTO-0196/0099	02-26-2002	J. BAILEY			DRUMS	012	NATIONAL		
MISC	00196	NAVFAC - SOUTHWEST DIVISION			IDWMP		SW02082312		
N68711-92-D-4670					METALS		IMAGED		
00006		R. SELBY			MW		SDNS_005		
					SOIL				
					WATER				
					WELLS				

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	CTO No.	EPA Cat. #	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
																	FRC Access. No. Box No. CD No.
N00245 / 000001	NONE	MM			05-30-2002	04-11-2002	NONE		LEE & ASSOCIATES N. LEE NAVFAC - SOUTHWEST DIVISION D. BELTON				TRANSCRIPT OF MINUTES OF TECHNICAL ADVISORY MEETING FOR INSTALLATION RESTORATION SITES (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD INFO REPOSITORY	CANCER CHARACTERIZATI COC ERA GW IRP METALS MTG MINS PAH PCB PESTICIDES RAB RI RSE SEDIMENTS SOIL SOIL BORING STORMWATER SVOC SWMU VOC WELLS	001 002 004 007	BECHTEL NATIONAL SW02070501

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000610	04-29-2002	NAVFAC - SOUTHWEST DIVISION	B2-B - BECHTEL NATIONAL
SWDIV SER 65EN/DB/99	04-18-2002	D. BELTON	BACKGROUND CANCER COMMENTS
MISC	NONE	DTSC - CYPRESS	COPC DREDGING
NONE		D. BAUTISTA	DUST
00032			GW
			METALS
			PAH
			PCB
			PESTICIDES
			RESPONSE
			RI
			SOIL
			VOC
			WATER
N00245 / 000070	06-05-2002	DTSC - CYPRESS	COMMENTS
NONE	05-24-2002	D. BAUTISTA	GW
LTR	NONE	NAVFAC - SOUTHWEST DIVISION	RI
NONE		D. BELTON	SW02082301
00002			IMAGED
			SDNS_011
N00245 / 000134	06-05-2002	CRWQCB - SAN DIEGO	COMMENTS
NONE	05-24-2002	L. WALSH	GW
LTR	NONE	NAVFAC - SOUTHWEST DIVISION	RESPONSE
NONE		T. MORLEY	SW02082304
00002			IMAGED
			SDNS_011

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification		Keywords		Sites		Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient	Subject		Classification		Keywords		Sites		FRC Access. No.	Box No.
Contr./Guid. No.	Approx. # Pages	EPA Cat. #												CD No.	
N00245 / 000871		08-06-2002		BECHTEL		FINAL SITE MANAGEMENT PLAN		ADMIN RECORD		AOC		001		P3-C - BECHTEL	
CTO-0020/0068 & CTO-0020/0092		07-22-2002	00020	ENVIRONMENTAL, INC.		INCLUDES ARCVIEW AND CAD				ARAR		002		NATIONAL	
PLAN				P. STANG		ELECTRONIC FIGURE FILES ON CDI				AST		003			
N68711-95-D-7526				NAVFAAC -						ATSDR		004		SW03061201	
00485				SOUTHWEST DIVISION						BTEX		007		IMAGED	
										COC		008		SDNS_012	
										COPC		010			
										COPEC		011			
										CRP		012			
										DRUMS		013			
										GW		020			
										HAZ WASTE		AOC 1			
										METALS		AOC 2			
										MW		AOC 3			
										NCP		BLDG. 129			
										NTCRA		BLDG. 130			
										ORDNANCE		BLDG. 132			
										PAH		BLDG. 20			
										PCB		BLDG. 290			
										PCE		BLDG. 3302			
										PESTICIDES		BLDG. 3322			
										POL		BLDG. 65			
										PRG		BLDG. 68			
										RAB		BLDG. 86			
										RCRA		SWMU 1			
										REMEDIAL ACTIO		SWMU 10			
										REMOVAL		SWMU 11			
										RFA		SWMU 12			
										RFI		SWMU 13			
										ROD		SWMU 14			
										SMP		SWMU 15			
										SOIL		SWMU 16			
										SOLVENTS		SWMU 17			
										SVE		SWMU 18			
										SVOC		SWMU 19			

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
	SWAT		SWMU 2
	SWMU		SWMU 20
	TCRA		SWMU 21
	TPH		SWMU 22
	TRPH		SWMU 23
	UST		SWMU 24
	UXO		SWMU 25
	VOC		SWMU 26
	VSI		SWMU 27
	WELLS		SWMU 28
			SWMU 29
			SWMU 3
			SWMU 30
			SWMU 4
			SWMU 5
			SWMU 6
			SWMU 7
			SWMU 8
			SWMU 9

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.





UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification		Keywords		Sites		Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient									FRC Access. No.	Box No.
Confr./Guid. No.	Approx. # Pages	EPA Cat. #												CD No.	
N00245 / 000920	NONE	10-17-2002	09-04-2002	NOAA - SACRAMENTO		COMMENTS, BY THE NATIONAL OCEAN SERVICE, ON THE ECOLOGICAL RISK ASSESSMENT, FINAL REMEDIAL INVESTIGATION FOR THE FORMER SEWAGE TREATMENT PLANT (SEE AR #902 - ERA)		ADMIN RECORD INFO REPOSITORY		COMMENTS ERA GW NCP RI SEDIMENTS SOIL		007		BECHTEL NATIONAL	
	MISC	NONE		D. KLIMAS										BNI - 05/19/03	
	NONE			NAVFAAC - SOUTHWEST DIVISION											
00006				E. DIAS											
N00245 / 000927	NONE	11-05-2002	09-16-2002	DTSC - CYPRESS		NOTIFICATION THAT DTSC DOES NOT CONCUR WITH THE NO FURTHER ACTION DESIGNATION FOR THE FORMER SEWAGE TREATMENT PLANT SITE IN THE PROPOSED PLAN AND ASKS THAT THE DESIGNATION BE REMOVED UNTIL THE SITE CAN BE INVESTIGATED MORE THOROUGHLY (SEE AR #912 - PLAN)		ADMIN RECORD INFO REPOSITORY		GW NFA PROPOSED PLAN SOIL WELLS		005 007 011 012		P3-C - BECHTEL NATIONAL	
	LTR	NONE		J. SCANDURA											
	NONE			NAVSTA SAN DIEGO										SW03061201	
00004				D. KEMP										IMAGED	
														SDNS_012	
N00245 / 000384	NONE	10-08-2002	09-18-2002	BECHTEL ENVIRONMENTAL, INC.		MATERIALS FROM THE PUBLIC MEETING REGARDING THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA W/ATTACHMENTS		ADMIN RECORD CONFIDENTIAL INFO REPOSITORY		COMMENTS PIM PROPOSED PLAN		005 007 011 012		P3-C - BECHTEL NATIONAL	
	CTO-0013/0121														
	MISC	00013												SW03061201	
N68711-95-D-7526				NAVFAAC - SOUTHWEST DIVISION										IMAGED	
00031														SDNS_012	



UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000917	CTO-0013/0100	RPT	N68711-95-D-7526	00581	10-08-2002 10-07-2002 00013	BECHTEL ENVIRONMENTAL, INC. C. YAMANE NAVFAC - SOUTHWEST DIVISION	FINAL REMEDIAL INVESTIGATION REPORT FOR THE FORMER SEWAGE TREATMENT PLANT SITE	ADMIN RECORD INFO REPOSITORY	ARAR ATSDR BGS CANCER COC COPC COPEC GW MW PAH PCB PRG QC RI ROD SARA SEDIMENTS SOIL SOIL BORING SVOC SWMU TRPH VOC WELLS	007	CHOICE IMAGING SOLUTIONS  SW04040801 IMAGED SDNS_012
N00245 / 000923	NONE MISC NONE 00004				10-24-2002 10-07-2002 NONE	LEE & ASSOCIATES N. LEE NAVFAC - SOUTHWEST DIVISION	TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON- CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Type	Record Date	FRC Access. No.
Contr./Guid. No.	CTO No.	Recipient Affil.	Box No.
Approx. # Pages	EPA Cat. #	Recipient	CD No.
	Subject	Classification	Keywords
			Sites
N00245 / 000938	01-21-2003	CRWQCB - SAN DIEGO	P3-C - BECHTEL NATIONAL
NONE	10-17-2002	J. ANDERSON	
MISC	NONE	NAVAFAC - SOUTHWEST DIVISION	COMMENTS GW PETROLEUM RESPONSE RI WELLS
NONE		T. MORLEY	
00003			
N00245 / 000929	11-05-2002	DTSC - CYPRESS	007
NONE	10-23-2002	S. LOWE	P3-C - BECHTEL NATIONAL
LTR	NONE	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD INFO REPOSITORY
NONE		D. BELTON	GW MW PCB SOIL BORING SOP WELLS
00004			
N00245 / 000947	03-20-2003	NAVAFAC - SOUTHWEST DIVISION	005
SWDIV SER	01-14-2003	D. KEMP	007
N46MS/0048	NONE	DTSC - CYPRESS	011
LTR		J. SCANDURA	012
NONE			SW03061202 IMAGED SDNS_012
00004			
N00245 / 000945	01-22-2003	NAVAFAC - SOUTHWEST DIVISION	007
SWDIV SER	01-16-2003	D. BELTON	P3-C - BECHTEL NATIONAL
5SEN/DB/012	NONE	DTSC - CYPRESS	CANCER GW METALS RI ROD SOIL
LTR		J. SCANDURA	SW03061202 IMAGED SDNS_012
NONE			
00005			
N00245 / 000964	04-24-2003	DTSC - CYPRESS	007
NONE	02-28-2003	S. LOWE	P3-C - BECHTEL NATIONAL
LTR	NONE	NAVAFAC - SOUTHWEST DIVISION	ADMIN RECORD GW
NONE		D. BELTON	
00002			
			SW03092401 IMAGED SDNS_012

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
					CTO No.	EPA Cat. #									FRC Access. No. Box No. CD No.
	N00245 / 000985				07-31-2003		CDM				GROUNDWATER MONITORING JUNE 2003 STATUS REPORT	ADMIN RECORD IR-READY		001 004 007	P3-C - BECHTEL NATIONAL  SW03092401 IMAGED SDNS_012
	DOC. NO. 6559 RPT N68711-00-D-0004 00004				07-15-2003 DO 0043		L. DAVIDSON NAVFAC - SOUTHWEST DIVISION D. BELTON								
	N00245 / 000993				09-05-2003		NAVFAC - SOUTHWEST DIVISION D. BELTON				TRANSMITTAL OF MAY AND JUNE 2003 SUMMARY TABLES OF GROUNDWATER ANALYTICAL RESULTS	ADMIN RECORD	GW	007	P3-C - BECHTEL NATIONAL
	SWDIV SER 5SEN.DB/203 LTR NONE 00007				08-19-2003 NONE		NAVFAC - SOUTHWEST DIVISION D. BELTON DTSC - CYPRESS D. BAUTISTA								SW03092401 IMAGED SDNS_012
	N00245 / 001030				12-18-2003		CDM FEDERAL PROGRAMS, CORP. D. COOPER NAVFAC - SOUTHWEST DIVISION				DATA SUMMARY REPORT FOR INSTALLATION RESTORATION SITE 7	ADMIN RECORD IR-READY	PCB VOC	007	BECHTEL NATIONAL  BNI - 06/28/04
	6712 RPT N68711-00-D-0004 00250				12-11-2003 DO 0043										
	N00245 / 001074				06-21-2004		NAVFAC - SOUTHWEST DIVISION				DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), (INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTON)	ADMIN RECORD	BTEX PAH PCB PLAN SVOC TPH VOC	005 007 011 012	CHOICE IMAGING SOLUTIONS  SW04071501
	SWDIV SER. 5SEN.DB/149 PLAN NONE 00200				06-01-2004 NONE										
	N00245 / 001080				08-23-2004		RWQCB L. WALSH NAVFAC - SOUTHWEST DIVISION D. BELTON				NO COMMENTS ON THE NO FURTHER ACTION RECORD OF DECISION (ROD)	ADMIN RECORD	COMMENTS	005 007 011 012	SOUTHWEST DIVISION
	NONE MISC NONE 00001				08-22-2004 NONE										

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
			Sites

Total Estimated Record Page Count: 11,149

Total - Administrative Records: 83

((SUBJECT Like "ACTION" Or SUBJECT Like "ASSESSM" Or SUBJECT Like "ARAR" Or SUBJECT Like "APPROPRIATE" Or SUBJECT Like "CHARACTERIZ" Or SUBJECT Like "CLOSURE" Or SUBJECT Like "FACILITY" Or SUBJECT Like "INVESTIG" Or SUBJECT Like "RESTORATION PROGRAM PLAN" Or SUBJECT Like "MONITORING" Or SUBJECT Like "NFA" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESULT" Or SUBJECT Like "RESPONSE" Or SUBJECT Like "SITE" Or SUBJECT Like "WORK PLAN" Or SUBJECT Like "RI/FS" Or SUBJECT Like "FEASIBILITY STUDY" Or SUBJECT Like "COMMENTS" Or SUBJECT Like "RCRA" Or SUBJECT Like "RECOVERY ACT" Or SUBJECT Like "HAZARD RANK" Or SUBJECT Like "INSPECTION" Or SUBJECT Like "SAMPLING" Or SUBJECT Like "REMEDIES" Or SUBJECT Like "REMEDY" Or SUBJECT Like "SOIL" Or SUBJECT Like "GROUNDWATER" Or SUBJECT Like "AIR" Or SUBJECT Like "PCBS" Or SUBJECT Like "EBS" Or SUBJECT Like "BASELINE" Or SUBJECT Like "QUALITY" Or SUBJECT Like "BACKGR" Or SUBJECT Like "PILOT" Or SUBJECT Like "CONSTR" Or SUBJECT Like "CONTINGENCY" Or SUBJECT Like "REMOVAL") AND (UIC NUMBER=N00245)

No Keywords

Sites=007

No Classification

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliography citations are considered to be part of this AR but may not be cited separately in the index.





NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

TECHNICAL DOCUMENTS FOR SITE 11

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location
Record Type	Contr./Guid. No.	Record Date	Author	Recipient						FRC Access. No. Box No. CD No.
Approx. # Pages	EPA Cat. #									
N00245 / 000300	05-26-1995		JACOBS			PRELIMINARY DRAFT SITE INSPECTION	ADMIN RECORD	SI	009	B2-B - BECHTEL
CLE-101-01F199-B6-	05-22-1992		ENGINEERING			WORK PLAN (SEE AR #449 & #455 -		WORK PLAN	010	NATIONAL
001	00199		S. GRISWOLD			COMMENTS BY DTSC, #450 - COMMENTS			011	
PLAN	01.2		NAVFAC -			BY CRWQCB, #454 - COMMENTS BY DHS &			012	SW02082311
N68711-89-D-9296			SOUTHWEST			#660 - TRANSMITTAL LETTER; AR #43 -				IMAGED
00330			DIVISION			NAVSTA COMMENTS}				SDNS_001
N00245 / 000449	10-31-1995		DTSC LONG			COMMENTS ON THE PRELIMINARY DRAFT	ADMIN RECORD	BRINSER STREET	009	B2-B - BECHTEL
LTR	07-08-1992		BEACH			SITE INSPECTION WORKPLAN (SEE AR		COMMENTS	010	NATIONAL
NONE	NONE		A.A. ARELLANO			#300 - WORK PLAN, #450 - COMMENTS BY		SI	011	
00002	01.6		NAVSTA SAN			CRWQCB, #454 - COMMENTS BY DHS,			012	SW02082314
			DIEGO			#455 - COMMENTS BY DTSC}				IMAGED
			G.A. DOUGLAS							SDNS_004
N00245 / 000450	01-15-2002		CRWQCB, SAN			COMMENTS ON THE PRELIMINARY DRAFT	ADMIN RECORD	COMMENTS	009	B2-B - BECHTEL
NONE	08-14-1992		DIEGO, CA			SITE INSPECTION WORK PLAN, FOR SITES		SI	010	NATIONAL
LTR	NONE		D. BARKER			9, 10, 11 AND 12 (SEE AR #300 - WORK		WORK PLAN	011	
NONE			NAVFAC -			PLAN, #449 & #455 - COMMENTS BY DTSC,			012	SW02082314
00005			SOUTHWEST			#454 - COMMENTS BY DHS}				IMAGED
			DIVISION							SDNS_005
			J. HEIBEL							
N00245 / 000042	07-12-1994		NAVFAC -			MEETING MINUTES ON IR SITES 9-12	ADMIN RECORD	BRINSER STREET	009	B2-B - BECHTEL
SWDIV SER	08-20-1992		SOUTHWEST			DATED 06 AUGUST 1992		IRP	010	NATIONAL
1822.RM/2086/2087	NONE		DIVISION					PCB	011	
LTR	01.1		J. HEIBEL						012	SW02082301
NONE			DHS/CRWQCB							IMAGED
00004			JUAN JIMENEZ/R.							SDNS_002
			DIMENTSTEIN							

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
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		Classification	Keywords
			Sites
N00245 / 000454	11-01-1995	DHS SAN DIEGO	B2-B - BECHTEL
	08-26-1992	J.A. MENATTI	NATIONAL
LTR	NONE	NAVSTA SAN	
NONE	01.6	DIEGO	SW02082314
00002		G.A. DOUGLASS	IMAGED
			SDNS_004
N00245 / 000455	11-01-1995	DTSC LONG	B2-B - BECHTEL
	08-27-1992	BEACH	NATIONAL
LTR	NONE	A.A. ARELLANO	
NONE	01.6	NAVSTA SAN	
00035		DIEGO	SW02082314
		G.A. DOUGLASS	IMAGED
			SDNS_004
N00245 / 000043	07-12-1994	NAVSTA SAN	B2-B - BECHTEL
NAVSTASD SER	09-08-1992	DIEGO	NATIONAL
OCSE/3957	00199	G.A. DOUGLASS	
LTR	01.0	NAVFAC -	
NONE		SOUTHWEST	SW02082301
00002		DIVISION	IMAGED
		CODE 18	SDNS_002
N00245 / 000453	11-01-1995	JACOBS	B2-B - BECHTEL
	03-17-1993	ENGINEERING	NATIONAL
MM	00199		
N68711-89-D-9296	01.6	NAVFAC -	SW02082314
00003		SOUTHWEST	IMAGED
		DIVISION	SDNS_004
		R. BASINET	
N00245 / 001053	03-30-2004	APCD - SAN	CHOICE IMAGING
NONE	08-14-1995	DIEGO	SOLUTIONS
MISC	NONE	M. LAKE	
NONE		DTSC - LONG	
00004		BEACH	SW04071501
		J. ZARNOCH	

Monday, September 13, 2004

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UIC No. / Rec. No.		Proc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #		Recipient						CD No.	
N00245 / 000458		11-28-1995		DTSC LONG BEACH		RESPONSE TO REQUEST FOR APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)	ADMIN RECORD	ARAR	001	BECHTEL	
LTR		10-18-1995		G. HOLMES				DPDO	002	NATIONAL	
NONE		NONE		NAVFAAC -				SALVAGE YARD	003		
00092		04.1		SOUTHWEST DIVISION					004	SW02011016	
				R. BASINET					007		
									008		
									010		
									011		
									012		
									013		
N00245 / 000542		05-22-1996		NAVFAAC -		INSTALLATION RESTORATION PROGRAM	ADMIN RECORD	BASIN	001	B2-B - BECHTEL	
		05-01-1996		SOUTHWEST DIVISION		PLAN NAVAL STATION SAN DIEGO		DPDO	002	NATIONAL	
PLAN		00071		R.M. SENG				SALVAGE YARD	003	000-00-0000	
N6871192D4670		11.6		NAVSTA SAN DIEGO					004	SW02082315	
00280									005	IMAGED	
									006	SDNS_009	
									007		
									008		
									009		
									010		
									011		
									012		
									013		
									014		
									015		
									016		
									017		
									018		
									019		
									020		

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Record Type	Record Date	Author		FRC Access. No.		
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.		
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.		
Classification						
Keywords						
Sites						
N00245 / 000683	04-22-1997 03-06-1997	RWQCB SAN DIEGO J. ROBERTUS NAVSTA SAN DIEGO T. MORLEY	APPROVAL OF REQUEST FOR NO FURTHER ACTION (INCLUDES 2 ENCLOSURES)	ADMIN RECORD  COMMENTS NFA SOIL	005 006 011	BECHTEL NATIONAL   SW02011022
LTR NONE 00007	NONE 01.6					
N00245 / 000260	11-29-2001 04-04-1997	DTSC - LONG BEACH D. BAUTISTA NAVFAC - SOUTHWEST DIVISION T. MORLEY	COMMENTS ON THE PROPOSED NO FURTHER ACTION FOR THE FRENCH DRAIN AND MURPHY CANYON HOUSING AREA - DTSC CANNOT MAKE A CONCLUSIVE DETERMINATION BASED ON THE SUPPLIED INFORMATION	ADMIN RECORD  COMMENTS GW NFA ORDNANCE SOIL WELLS	006 011	B2-B - BECHTEL NATIONAL   SW02082309 IMAGED SDNS_008
LTR NONE 00006	NONE					
N00245 / 000009	08-24-1999 10-14-1997	DTSC LONG BEACH J. SCANDURA NAVSTA SAN DIEGO T. MORLEY	CONCURRENCE WITH NAVY'S REQUEST FOR NO FURTHER ACTION FOR THE FRENCH DRAIN SITE	ADMIN RECORD  METALS NFA PCB PRG SOIL SVOC VOC	011	BECHTEL NATIONAL   SW02011001
NONE LTR NONE 00002	NONE 01.6					
N00245 / 000133	10-26-1999 09-23-1999	BECHTEL NATIONAL INC J. BAILEY NAVFAC - SOUTHWEST DIVISION C. URIAS	PRELIMINARY FINAL - CORRELATION OF SEDIMENT STUDY TO INSTALLATION RESTORATION PROGRAM SITES	ADMIN RECORD INFO REPOSITORY  DATA METALS MONITORING PCB SEDIMENTS STORMWATER	001 002 003 004 007 008	B2-B - BECHTEL NATIONAL   SW02082303 IMAGED SDNS_010
CTO-0169/0144 RPT N68711-92-D-4670 00291	00169 01.1					

Monday, September 13, 2004

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UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
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Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
N00245 / 000871	08-06-2002	BECHTEL ENVIRONMENTAL, INC.	001 P3-C - BECHTEL, NATIONAL
CTO-0020/0068 & CTO-0020/0092	07-22-2002	FINAL SITE MANAGEMENT PLAN INCLUDES ARCVIEW AND CAD ELECTRONIC FIGURE FILES ON CDI	002
PLAN	00020	P. STANG	003
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION	004
00485			007
			008
			010
			011
			012
			013
			020
			AOC 1
			AOC 2
			AOC 3
			BLDG. 129
			BLDG. 130
			BLDG. 132
			BLDG. 20
			BLDG. 290
			BLDG. 3302
			BLDG. 3322
			BLDG. 65
			BLDG. 66
			BLDG. 68
			BLDG. 86
			SWMU 1
			SWMU 10
			SWMU 11
			SWMU 12
			SWMU 13
			SWMU 14
			SWMU 15
			SWMU 16
			SWMU 17
			SWMU 18
			SWMU 19

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
								SWAT	SWMU 2	
								SWMU	SWMU 20	
								TCRA	SWMU 21	
								TPH	SWMU 22	
								TRPH	SWMU 23	
								UST	SWMU 24	
								UXO	SWMU 25	
								VOC	SWMU 26	
								VSI	SWMU 27	
								WELLS	SWMU 28	
									SWMU 29	
									SWMU 3	
									SWMU 30	
									SWMU 4	
									SWMU 5	
									SWMU 6	
									SWMU 7	
									SWMU 8	
									SWMU 9	





UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
		Subject	
		Classification	Keywords
			Sites
N00245 / 000384	10-08-2002	BECHTEL ENVIRONMENTAL, INC.	COMMENTS 005 P3-C - BECHTEL NATIONAL
CTO-0013/0121	09-18-2002		007
MISC	00013		011
N68711-95-D-7526		NAV/FAC - SOUTHWEST DIVISION	012 SW03061201 IMAGED SDNS_012
00031			
N00245 / 000912	09-17-2002	BECHTEL ENVIRONMENTAL, INC.	AIR 005 P3-C - BECHTEL NATIONAL
CTO-0013/0122	09-26-2002		007
PLAN	00013		011
N68711-95-D-7526		NAV/FAC - SOUTHWEST DIVISION	012 SW03061201 IMAGED SDNS_012
00017			

PROPOSED PLAN FOR THE ADMIRAL  
 BAKER GOLF COURSE, FORMER SEWAGE  
 TREATMENT PLANT, FRENCH DRAIN, AND  
 BRINSER STREET PARKING AREA - NAVY  
 PROPOSES NO FURTHER ACTION  
 (WRITTEN IN BOTH ENGLISH AND SPANISH)

ADMIN RECORD  
 INFO  
 REPOSITORY

AIR  
 ARSENIC  
 BGS  
 CANCER  
 GW  
 LF  
 METALS  
 NCP  
 NFA  
 PA  
 PAH  
 PCB  
 PROPOSED PLAN  
 REMEDIAL ACTIO  
 RI  
 ROD  
 RSE  
 SI  
 SOIL  
 SOLVENTS  
 SVOC  
 TPH  
 VOC  
 WATER

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No.	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000923	NONE	MISC	NONE	00004	10-24-2002 10-07-2002 NONE	LEE & ASSOCIATES N. LEE NAVFAC - SOUTHWEST DIVISION	TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON- CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012
N00245 / 000947	SWDIV SER N46MS/0048 LTR NONE 00004		03-20-2003 01-14-2003 NONE		NAVAFAC - SOUTHWEST DIVISION D. KEMP DTSC - CYPRESS J. SCANDURA	LETTER IN RESPONSE TO DTSC'S LETTER OF 16 SEPTEMBER 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP SITE 7	ADMIN RECORD INFO REPOSITORY			005 007 011 012	P3-C - BECHTEL NATIONAL  SW03061202 IMAGED SDNS_012
N00245 / 001074	SWDIV SER. 5SENDB/149 PLAN NONE 00200		06-21-2004 06-01-2004 NONE		NAVAFAC - SOUTHWEST DIVISION	DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), (INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTON)	ADMIN RECORD	BTEX PAH PCB PLAN SVOC TPH VOC		005 007 011 012	CHOICE IMAGING SOLUTIONS  SW04071501
N00245 / 001080	NONE	MISC	08-23-2004 08-22-2004 NONE	00001	RWQCB L. WALSH NAVFAC - SOUTHWEST DIVISION D. BELTON	NO COMMENTS ON THE NO FURTHER ACTION RECORD OF DECISION (ROD)	ADMIN RECORD	COMMENTS		005 007 011 012	SOUTHWEST DIVISION

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guld. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
			Sites

Total Estimated Record Page Count: 2,403

Total - Administrative Records: 29

((SUBJECT Like "ACTION" Or SUBJECT Like "ASSESSM" Or SUBJECT Like "ARAR" Or SUBJECT Like "APPROPRIATE" Or SUBJECT Like "CHARACTERIZ" Or SUBJECT Like "CLOSURE" Or SUBJECT Like "FACILITY" Or SUBJECT Like "INVESTIG" Or SUBJECT Like "RESTORATION PROGRAM PLAN" Or SUBJECT Like "MONITORING" Or SUBJECT Like "NEA" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESULT" Or SUBJECT Like "RESPONSE" Or SUBJECT Like "SITE" Or SUBJECT Like "WORK PLAN" Or SUBJECT Like "R/FS" Or SUBJECT Like "FEASIBILITY STUDY" Or SUBJECT Like "COMMENTS" Or SUBJECT Like "RCRA" Or SUBJECT Like "RECOVERY ACT" Or SUBJECT Like "HAZARD RANK" Or SUBJECT Like "INSPECTION" Or SUBJECT Like "SAMPLING" Or SUBJECT Like "REMEDIES" Or SUBJECT Like "REMEDY" Or SUBJECT Like "SOIL" Or SUBJECT Like "GROUNDWATER" Or SUBJECT Like "AIR" Or SUBJECT Like "PCBS" Or SUBJECT Like "EBS" Or SUBJECT Like "BASELINE" Or SUBJECT Like "QUALITY" Or SUBJECT Like "BACKGR" Or SUBJECT Like "PILOT" Or SUBJECT Like "CONSTR" Or SUBJECT Like "CONTINGENCY" Or SUBJECT Like "REMOVAL") AND (UIC NUMBER=N00245)

No Keywords

Sites=011

No Classification







NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

TECHNICAL DOCUMENTS FOR SITE 12

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location
Record Type	Constr./Guid. No.	Record Date	Author	Recipient	Subject	Classification	Keywords	Sites	Location	FRC Access. No. Box No. CD No.
Approx. # Pages	EPA Cat. #	CTO No.	Author	Recipient	Subject	Classification	Keywords	Sites	Location	FRC Access. No. Box No. CD No.
N00245 / 000094	08-04-1994	08-04-1994	BENTON ENGINEERING, INC.	BENTON ENGINEERING, INC.	SUPPLEMENTAL REPORT PROPOSED COLD STORAGE WAREHOUSE PROJECT P-086 EAST OF SITE 12	ADMIN RECORD	BRINSER STREET DATA	012	B2-B - BECHTEL NATIONAL	
PROJECT NO. 89-6-A8F	10-17-1989	NONE	P.H. BENTON	P.H. BENTON						
RPT	01.1		ST. ONGE RUFF & ASSO	ST. ONGE RUFF & ASSO						
NONE			D. LANDIS	D. LANDIS						
00046			IT CORP.	IT CORP.	REPORT OF SOIL INVESTIGATIONS AT FUTURE SITE OF MILCON P-066 SITE 12	ADMIN RECORD	BRINSER STREET QA QC	012	CHOICE IMAGING SOLUTIONS	
N00245 / 000088	08-04-1994	11-01-1989	NAVFAAC - SOUTHWEST DIVISION	NAVFAAC - SOUTHWEST DIVISION						
RPT	NONE									
N6871188D2616	01.4									
00150										
N00245 / 000090	08-04-1994	04-20-1990	DAMES & MOORE	DAMES & MOORE	FINAL - SUBSURFACE SITE INVESTIGATION REPORT FOR PROPOSED MILCON P-065 SITE	ADMIN RECORD	BRINSER STREET SI	012	BECHTEL NATIONAL	
RPT	NONE		NAVFAAC - SOUTHWEST DIVISION	NAVFAAC - SOUTHWEST DIVISION						
NONE	01.4									
00085										
N00245 / 000559	06-24-1996	11-20-1990	BENTON ENGINEERING, INC.	BENTON ENGINEERING, INC.	SOIL INVESTIGATION PROPOSED DRY STORAGE WAREHOUSE PROJECT P-065 SITE 12	ADMIN RECORD		012	B2-B - BECHTEL NATIONAL	
RPT	NONE		P. H. BENTON	P. H. BENTON						
NONE	01.1		NAVSTA SAN DIEGO	NAVSTA SAN DIEGO						
00188										

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
N00245 / 000534	05-15-1996 03-04-1992	MAC GENERAL CORP. D. MCADAMS NAVSTA SAN DIEGO	LABORATORY RESULTS OF THE IMPROVE REPAIR STAGING & MARSHALLING AREA OF SITE 12 (REF TO DOC NO 000522)
LTR	NONE		ADMIN RECORD
NONE	02.7		ACTMEMO
00005			BRINSER STREET DATA
			012
			B2-B - BECHTEL NATIONAL
			000-00-0000
			SW02082315
			IMAGED
			SDNS_005
N00245 / 000300	05-26-1995	JACOBS ENGINEERING	PRELIMINARY DRAFT SITE INSPECTION
CLE-I07-01F199-B6-05-22-1992	00199	S. GRISWOLD	WORK PLAN (SEE AR #449 & #455 - COMMENTS BY DTSC, #450 - COMMENTS BY CRWQCB, #454 - COMMENTS BY DHS & #660 - TRANSMITTAL LETTER; AR #43 - NAVSTA COMMENTS)
PLAN	01.2	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD
N68711-89-D-9296			SI
00330			WORK PLAN
			009
			010
			011
			012
			SW02082311
			IMAGED
			SDNS_001
N00245 / 000449	10-31-1995	DTSC LONG BEACH	COMMENTS ON THE PRELIMINARY DRAFT SITE INSPECTION WORKPLAN (SEE AR #300 - WORK PLAN, #450 - COMMENTS BY CRWQCB, #454 - COMMENTS BY DHS, #455 - COMMENTS BY DTSC)
LTR	07-08-1992	A.A. ARELLANO	ADMIN RECORD
NONE	NONE	NAVSTA SAN DIEGO	BRINSER STREET
00002	01.6	G.A. DOUGLAS	COMMENTS
			SI
			009
			010
			011
			012
			SW02082314
			IMAGED
			SDNS_004
N00245 / 000450	01-15-2002	CRWQCB, SAN DIEGO, CA	COMMENTS ON THE PRELIMINARY DRAFT SITE INSPECTION WORK PLAN, FOR SITES 9, 10, 11 AND 12 (SEE AR #300 - WORK PLAN, #449 & #455 - COMMENTS BY DTSC, #454 - COMMENTS BY DHS)
LTR	08-14-1992	D. BARKER	ADMIN RECORD
NONE	NONE	NAVFAC - SOUTHWEST DIVISION	COMMENTS
00005		J. HEIBEL	SI
			WORK PLAN
			009
			010
			011
			012
			SW02082314
			IMAGED
			SDNS_005
N00245 / 000042	07-12-1994	NAVFAC - SOUTHWEST DIVISION	MEETING MINUTES ON IR SITES 9-12 DATED 06 AUGUST 1992
SWDIV SER	08-20-1992		ADMIN RECORD
1822.RM/2086/2087	NONE		BRINSER STREET
LTR	01.1	J. HEIBEL	IRP
NONE		DHS/CRWQCB	PCB
00004		JUAN JIMENEZ/R. DIMENTSTEIN	009
			010
			011
			012
			SW02082301
			IMAGED
			SDNS_002

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000454		11-01-1995	DHS SAN DIEGO	J.A. MENATTI		COMMENTS ON THE PRELIMINARY DRAFT SITE INSPECTION WORKPLAN 22 MAY 1992 SITES 9, 10, 11, & 12 (SEE AR #300 - WORK PLAN, #449 & #455 - COMMENTS BY DTSC, #450 - COMMENTS BY CRWQCB)	ADMIN RECORD	BRINSER STREET COMMENTS	009 010 011 012	B2-B - BECHTEL NATIONAL  SW02082314 IMAGED SDNS_004
	LTR	08-26-1992	NAVSTA SAN DIEGO							
	NONE	01.6	G.A. DOUGLASS							
	00002									
N00245 / 000455		11-01-1995	DTSC LONG BEACH			COMMENTS ON THE PRELIMINARY DRAFT SITE INSPECTION WORKPLAN 22 MAY 1992 SITES 9, 10, 11, & 12 GENERAL AND SPECIFIC COMMENTS (SEE AR #300 - WORK PLAN, #449 - COMMENTS BY DTSC, #450 - COMMENTS BY CRWQCB, #454 - COMMENTS BY DHS)	ADMIN RECORD	BRINSER STREET COMMENTS	009 010 011 012	B2-B - BECHTEL NATIONAL  SW02082314 IMAGED SDNS_004
	LTR	08-27-1992	A.A. ARELLANO							
	NONE	01.6	NAVSTA SAN DIEGO							
	00035		G.A. DOUGLASS							
N00245 / 000043		07-12-1994	NAVSTA SAN DIEGO			COMMENTS ON DRAFT SITE INSPECTION WORK PLAN (SEE AR #300 - PRELIMINARY DRAFT SI WORK PLAN)	ADMIN RECORD	BRINSER STREET COMMENTS	009 010 011 012	B2-B - BECHTEL NATIONAL  SW02082301 IMAGED SDNS_002
	NAVSTASD SER	09-08-1992	G.A. DOUGLASS							
	OCSE/3957	00199	NAVFAAC - SOUTHWEST DIVISION							
	LTR	01.0	CODE 18							
	NONE									
	00002									
N00245 / 000098		08-04-1994	BENTON ENGINEERING, INC.			SUPPLEMENTAL INVESTIGATION GENERAL WAREHOUSE ADDITION MCON P-065 DETERMINE POTENTIAL FOR SOIL CONTAMINATION IN CERTAIN AREAS WEST OF ADDITION	ADMIN RECORD	BRINSER STREET SALVAGE YARD	012	BECHTEL NATIONAL  SW02011003
	RPT	11-19-1992	D.L. LEADLAY							
	NONE	03.3	ST ONGE RUFF & ACCOC							
	00175		D. LANDIS							
N00245 / 000453		11-01-1995	JACOBS ENGINEERING			REGULATORY MEETING MINUTES ON THE PRELIMINARY DRAFT SI FOR SITES 9 THROUGH 12	ADMIN RECORD	MTG MINS	009 010 011 012	B2-B - BECHTEL NATIONAL  SW02082314 IMAGED SDNS_004
	MM	03-17-1993								
	00199									
	N68711-89-D-9296	01.6	NAVFAAC - SOUTHWEST DIVISION							
	00003		R. BASINET							

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
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Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000287	04-05-1995 12-17-1993	JACOBS ENGINEERING S. GRISWOLD	SI 010 012
PLAN	00199	NAVFAAC - SOUTHWEST DIVISION	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_003
N68711-89-D-9296	03.3		
00280			
N00245 / 000447	10-31-1995 01-19-1994	DHS SAN DIEGO S. KINGHORN	COMMENTS ON THE DRAFT SITE INSPECTION WORKPLAN FOR SITES 10 AND 12
FAX	NONE	NAVFAAC - SOUTHWEST DIVISION	SI 010 012
NONE	01.6	R. BASINET	BECHTEL NATIONAL SW02011016
00003			
N00245 / 000285	04-05-1995 01-24-1994	JACOBS ENGINEERING	ADMIN RECORD
RPT	00271	L. ALLEN	SA 008 012
N68711-89-D-9296	00.0	NAVFAAC - SOUTHWEST DIVISION	PRELIMINARY SITE ASSESSMENT AND EMERGENCY REMOVAL OF FREE FLOATING PRODUCT (REF TO DOC NO N00245.000539)
00445			B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_003
N00245 / 000029	07-11-1994 02-16-1994	CRWQCB -SAN DIEGO	ADMIN RECORD
NONE	NONE	J.P. ANDERSON	COMMENTS HAZ WASTE 010 012
LTR	NONE	NAVSTA SAN DIEGO	010 012
NONE	01.4		
00003		S.K. ANDERSON	COMMENTS ON DRAFT SITE INSPECTION WORK PLAN FOR THE ORIGINAL RICE KING RESTAURANT SITE AND BRINSER STREET PARKING AREA (SEE AR #287 - DRAFT SI WORK PLAN)
N00245 / 000448	10-31-1995 03-11-1994	DTSC LONG BEACH	ADMIN RECORD
FAX	NONE	J.J. ZARNOCH	COMMENTS SI 010 012
NONE	01.6	NAVFAAC - SOUTHWEST DIVISION	010 012
00009		R. BASINET	B2-B - BECHTEL NATIONAL SW02082314 IMAGED SDNS_004

Monday, September 13, 2004

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Record Type	Contr./Guid. No.	Record Date	Author	Recipient						FRC Access. No. Box No. CD No.
Approx. # Pages	EPA Cat. #	CTO No.								
N00245 / 000031	07-11-1994	03-21-1994	DTSC	J.J. ZARNOCH		COMMENTS ON DRAFT SITE INSPECTION WORK PLAN, ORIGINAL RICE KING RESTAURANT AND BRINSER STREET PARKING AREA (SEE AR #287 - DRAFT SI WORK PLAN)	ADMIN RECORD	COMMENTS SI	010 012	B2-B - BECHTEL NATIONAL
LTR	NONE	NONE	NAVFAAC - SOUTHWEST DIVISION							SW02082301 IMAGED SDNS_002
00008	01.4		RICK BASINET							
N00245 / 000265	01-04-1995	12-21-1994	JACOBS ENGINEERING			FINAL EXPANDED SITE INSPECTION WORK PLAN FOR IR SITES 10 & 12 REVISION 0 (W/TRANSMITTAL SHEET)	ADMIN RECORD	ESI SI	010 012	B2-B - BECHTEL NATIONAL
PLAN	00199		S. GRISWOLD							
N68711-89-D-9296	01.4		NAVFAAC - SOUTHWEST DIVISION							SW02082309 IMAGED SDNS_004
00352										
N00245 / 000418	09-12-1995	03-24-1995	NAVFAAC - SOUTHWEST DIVISION			REQUEST FOR DTSC IDENTIFY POTENTIAL STATE CHEMICAL-SPECIFIC AND LOCATION-SPECIFIC APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS FOR AN INTERIM REMOVAL ACTION	ADMIN RECORD	ARAR REMOVAL SALVAGE YARD	003 012	B2-B - BECHTEL NATIONAL
LTR	NONE	NONE	K. REYNOLDS							SW02082314 IMAGED SDNS_004
NONE	06.3		DTSC LONG BEACH							
00004			J. ZARNOCH							
N00245 / 000291	05-08-1995	03-30-1995	BECHTEL NATIONAL			FINAL TECHNICAL MEMORANDUM FOR IR SITE 12	ADMIN RECORD	TECH MEMO	012	B2-B - BECHTEL NATIONAL
RPT	NONE	NONE								000-00-0000
NONE	01.4		NAVFAAC - SOUTHWEST DIVISION							SW02082310 IMAGED SDNS_006
00103										
N00245 / 000363	03-06-2002	05-09-1995	BECHTEL NATIONAL, INC.			SUMMARIZED COMMENTS/SUGGESTED RESOLUTIONS TO OHM REMEDIATION'S DRAFT SITE WORK PLAN	ADMIN RECORD	AIR COMMENTS DQO MONITORING PID RSE SOIL SOIL BORING WORK PLAN	012	B2-B - BECHTEL NATIONAL
CTO-0011/0088	00011		W. SHIPMAN							SW02082312 IMAGED SDNS_010
MISC			NAVFAAC - SOUTHWEST DIVISION							
N68711-92-D-4670			K. REYNOLDS							
00011										

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000321	06-07-1995	CRWQCB SAN DIEGO	ADMIN RECORD
LTR	05-11-1995	J.P. ANKERSON	COMMENTS
NONE	NONE	NAVSTA SAN DIEGO	SI
00002	01.6	T. MORLEY	TECH MEMO
N00245 / 000520	04-26-1996	OHM	ADMIN RECORD
NONE	06-01-1995	REMEDICATION	REMOVAL
PLAN	DO 21	NAVFAC - SOUTHWEST DIVISION	RSE
N68711-93-D-1459	03.3		FINAL SITE WORK PLAN REMOVAL SITE EVALUATION FOR SITE 12 - THIS RECORD IS FILED AS AN ENCLOSURE TO AR #543 - PRE-FINAL REMOVAL ACTION WORK PLAN, DATED 05/20/96
00250			
N00245 / 000529	05-10-1996	OHM	ADMIN RECORD
NONE	06-01-1995	REMEDICATION	REMOVAL
RPT	DO 21	C. JEPERSEN	RSE
N6871193D1459	02.2	NAVFAC - SOUTHWEST DIVISION	
00450			
N00245 / 000361	07-25-1995		ADMIN RECORD
MM	06-28-1995		MTG MINS
N68711-92-D-4670	00072		RAB
00059	10.4		SALVAGE YARD
N00245 / 000647	11-08-1996	CRWQCB SAN DIEGO	ADMIN RECORD
LTR	08-09-1995	J. ANDERSON	COMMENTS
NONE	NONE	DTSC LONG BEACH	WORK PLAN
00002	10.1	J. ZARNOCH	

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient						FRC Access. No.	Box No.
Confr./Guid. No.	Approx. # Pages	EPA Cat. #									CD No.	
N00245 / 000424		09-12-1995		NAVFAC - SOUTHWEST DIVISION		CONFIRMATION OF TELEPHONE CONVERSATION REGARDING REVIEW COMMENTS FROM THE STATE OF CALIFORNIA ON THE PRE-FINAL SITE WORK PLAN FOR SITE 12 AREA BY RWQCB		ADMIN RECORD	COMMENTS WORK PLAN	012	B2-B - BECHTEL NATIONAL	
LTR		08-18-1995		K.E. REYNOLDS							SW02082314	
NONE		01.6		DTSC LONG BEACH							IMAGED	
00002				J. ZARNOCH							SDNS_004	
N00245 / 000425		09-12-1995		NAVFAC - SOUTHWEST DIVISION		REPLACEMENT PAGES FOR THE REMOVAL SITE EVALUATION WORK PLAN FOR SITE 12 AND RESPONSES TO COMMENTS ON THE PRE-FINAL WORK PLAN RSE AT SITE 12 (SEE AR #529 - PRE FINAL SITE RSE WORK PLAN)		ADMIN RECORD	COMMENTS RSE	012	BECHTEL NATIONAL	
LTR		08-28-1995		K.E. REYNOLDS								
NONE		01.6		CRWQCB SAN DIEGO							SW02011015	
00004				M. HUMPHRIES								
N00245 / 000460		11-28-1995		BECHTEL NATIONAL INC		BORING MONITORING WELL COMPLETION REPORT WITH DWR 188 FORM		ADMIN RECORD	MONITORING PERMIT	012	BECHTEL NATIONAL	
CTO-0011/0146		10-16-1995		W. SHIPMAN		ATTACHMENT PERMIT NO. 94903 SITE 12 (BRINSER STREET PARKING AREA)			WELLS			
LTR		00011		CAL DEPT WTR RESOURC							IMAGED	
N6871192D4670		02.2									SDNS_004	
00050												
N00245 / 000458		11-28-1995		DTSC LONG BEACH		RESPONSE TO REQUEST FOR APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)		ADMIN RECORD	ARAR	001	BECHTEL NATIONAL	
LTR		10-18-1995		G. HOLMES					DPDO	002		
NONE		NONE		NAVFAC - SOUTHWEST DIVISION					SALVAGE YARD	003		
00092		04.1		R. BASINET						004	SW02011016	
										007		
										008		
										010		
										011		
										012		
										013		
N00245 / 000518		04-26-1996		BECHTEL NATIONAL INC		DRAFT EXPANDED SITE INSPECTION REPORT SITE 12 BRINSER STREET PARKING AREA		ADMIN RECORD	ESI	012	B2-B - BECHTEL NATIONAL	
RPT		12-01-1995		M. KARIMI							000-00-0000	
N6871192D4670		00011		NAVFAC - SOUTHWEST DIVISION								
00250		01.2										

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location
Record Type	Record Date	Author	FRC Access. No.	
Contr./Guid. No.	CTO No.	Recipient Affil.	Box No.	
Approx. # Pages	EPA Cat. #	Recipient	CD No.	
		Subject	Classification	Keywords
				Sites
N00245 / 000519	04-26-1996	BECHTEL NATIONAL INC	MISSING @ SMDIV	012
RPT	12-01-1995	M. KARIMI		SOUTHWEST DIVISION
N6871192D4670	01.2	NAVFAC - SOUTHWEST DIVISION		
00250				
N00245 / 000800	03-09-1998	OHM	ADMIN RECORD	012
SWM162	12-01-1995	REMEDIATION		P3-C - BECHTEL NATIONAL
RPT	DO 21			
N68711-93-D-1459	03.4	NAVSTA SAN DIEGO		SW02110701 IMAGED SDNS_011
00691				
N00245 / 000471	02-08-1996	DTSC LONG BEACH	ADMIN RECORD	012
LTR	12-04-1995	G. HOLMES		SW02082314 IMAGED SDNS_004
NONE	NONE	NAVFAC - SOUTHWEST DIVISION		
00008	01.6	R. BASINET		
N00245 / 000491	04-01-1996	LAW OFFICES OF J.C. REDDING	ADMIN RECORD	003
LTR	12-11-1995	NAVSTA SAN DIEGO		B2-B - BECHTEL NATIONAL
NONE	NONE	T. MORLEY		
00016	01.6			SW02082314 IMAGED SDNS_004
N00245 / 000480	02-22-1996	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD	012
LTR	01-05-1996			B2-B - BECHTEL NATIONAL
NONE	NONE	K. REYNOLDS		
00002	01.6	DTSC LONG BEACH		SW02082314 IMAGED SDNS_004
		D. YAFFE		

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	FRC Access. No.	Box No.	CD No.
N00245 / 000553	LTR	NONE	00005	06-24-1996	01-17-1996	DO 21	OHM	REMEDICATION	B. SIMONS	NAVAFAC - SOUTHWEST DIVISION	SCOPE OF WORK TO INSTALL AND SAMPLE FIVE GROUNDWATER WELLS IN SUPPORT OF THE CURRENT EXTENDED SITE INVESTIGATION AT IR SITE 12	ADMIN RECORD	ESI GW MW SI SOW WELLS	012	B2-B - BECHTEL NATIONAL			
N00245 / 000488	LTR	NONE	00008	03-28-1996	02-20-1996	NONE	NAVAFAC - SOUTHWEST DIVISION	K. REYNOLDS	NAVAFAC - SOUTHWEST DIVISION	K. REYNOLDS	CONCURRENCE FROM REGULATORY AGENCIES ON DECEMBER 18, 1995 PROJECT TEAM TO PROCEED WITH INSTALLING FIVE MONITORING WELLS AT SITE 12	ADMIN RECORD	MONITORING WELLS	012	B2-B - BECHTEL NATIONAL			
N00245 / 000511	RPT	NONE	00733	04-03-1996	03-01-1996	DO 21	OHM	REMEDICATION	W. SIMONS	NAVAFAC - SOUTHWEST DIVISION	FINAL REMOVAL SITE EVALUATION FOR SITE 12	ADMIN RECORD	REMOVAL RSE	012	B2-B - BECHTEL NATIONAL			
N00245 / 000523	MISC	NONE	00002	04-26-1996	04-01-1996	NONE	NAVAFAC - SOUTHWEST DIVISION	COMMUNITY MEMBERS	NAVAFAC - SOUTHWEST DIVISION	COMMUNITY MEMBERS	FACT SHEET #1 - ENVIRONMENTAL CLEANUP PROGRAM, REMOVAL ACTION, ANNOUNCING PUBLIC REVIEW PERIOD FOR THE SITE 12, PROPOSED CLEANUP ACTION	ADMIN RECORD	FACT SHEET PUBNOT	012	B2-B - BECHTEL NATIONAL			
N00245 / 000535	FAX	NONE	00002	05-15-1996	04-10-1996	NONE	OHM	REMEDICATION	D. OLSON	BROWN & CALDWELL	REVISED DOLLAR AMOUNT FOR SITE 12 WORK PER K. REYNOLDS AT SOUTHWEST DIVISION SITE 12 (REF TO DOC NO 000522)	ADMIN RECORD	ACTMEMO COST	012	BECHTEL NATIONAL			

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location				
Doc. Control No.	Record Date	Author	FRC Access. No.				
Record Type	CTO No.	Recipient Affil.	Box No.				
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.				
Approx. # Pages		Subject	Classification				
			Keywords				
			Sites				
N00245 / 000521	04-26-1996 04-19-1996	THE COMPASS	NEWSPAPER ARTICLE "SCRUBBIN' THE DIRTY DECKS" AT SITE 12	ADMIN RECORD	PUBNOT	012	B2-B - BECHTEL NATIONAL
MISC NONE 00001	NONE 10.6	COMMUNITY MEMBERS					000-00-0000 SW02082315 IMAGED SDNS_004
N00245 / 000547	05-30-1996 04-19-1996	DTSC LONG BEACH	COMMENTS ON THE FACT SHEET FOR THE TIME CRITICAL REMOVAL ACTION	ADMIN RECORD	COMMENTS	012	B2-B - BECHTEL NATIONAL
LTR NONE 00007	NONE 10.1	J.M. JIMENEZ NAVSTA SAN DIEGO T.L. MORLEY	MEMORANDUM/REMOVAL ACTION WORK PLAN FOR SITE 12				SW02082316 IMAGED SDNS_004
N00245 / 000524	04-26-1996 04-20-1996	THE STAR NEWS	NEWSPAPER ARTICLE "PUBLIC NOTICE ANNOUNCING PUBLIC REVIEW AND COMMENT PERIOD FOR THE SITE 12 PRE-FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/WORK PLAN"	MISSING @ SWDIV	PUBNOT TCRA	012	SOUTHWEST DIVISION
MISC NONE 00001	NONE 10.6	COMMUNITY MEMBERS					
N00245 / 000531	05-14-1996 04-21-1996	STAR NEWS	NEWSPAPER ARTICLE "PUBLIC NOTICE FOR PROPOSED CLEANUP ACTION AT NAVAL STATION OPEN FOR PUBLIC REVIEW" SITE 12	ADMIN RECORD	PUBNOT	012	B2-B - BECHTEL NATIONAL
MISC NONE 00001	NONE 10.3	COMMUNITY MEMBERS					000-00-0000 SW02082315 IMAGED SDNS_006
N00245 / 000533	05-15-1996 04-23-1996	OHM REMEDIATION	BREAKDOWN OF ALTERNATIVE COSTS FOR SITE 12 (REF TO DOC NO 000522)	ADMIN RECORD	ACTMEMO COST	012	BECHTEL NATIONAL
FAX NONE 00003	NONE 02.7	M. KYLO BROWN & CALDWELL K. COLLINS					SW02011018
N00245 / 000522	04-26-1996 04-24-1996	BECHTEL NATIONAL INC	PRELIMINARY FINAL TIME CRITICAL REMOVAL ACTION	ADMIN RECORD	TCRA	012	B2-B - BECHTEL NATIONAL
MEMO N6871192D4670 00131	00083 02.5	W. SHIPMAN NASTA SAN DIEGO	MEMORANDUM/REMOVAL ACTION WORK PLAN-SITE 12				000-00-0000 SW02082315 IMAGED SDNS_004

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
					CTO No.	EPA Cat. #									FRC Access. No. Box No. CD No.
N00245 / 000542					05-22-1996		NAVFAAC - SOUTHWEST DIVISION				INSTALLATION RESTORATION PROGRAM PLAN NAVAL STATION SAN DIEGO	ADMIN RECORD	BASIN DPDO SALVAGE YARD	001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_009
PLAN					05-01-1996	00071									
N6871192D4670					11.6		R.M. SENGCA								
00280							NAVSTA SAN DIEGO								
N00245 / 000620					08-12-1996		NAVSTA SAN DIEGO				PRELIMINARY FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/REMEDIAL ACTION WORK PLAN	ADMIN RECORD	ACTMEMO REMOVAL TORA WORK PLAN	012	BECHTEL NATIONAL SW02011020
PLAN					05-02-1996	00083									
N6871192D4670					03.3		NAVFAAC - SOUTHWEST DIVISION								
00070															
N00245 / 000527					05-10-1996		DTSC LONG BEACH				PROPOSED NEGATIVE DECLARATION SITE 12 BRINSER STREET PARKING AREA	ADMIN RECORD	ACTMEMO	012	BECHTEL NATIONAL SW02011018
PLAN					05-09-1996	NONE	J.E. SCANDURA								
NONE					02.0		NAVSTA SAN DIEGO								
00043															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location			
Record Type	Record Date	Author		FRC Access. No.			
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.			
Classification	Keywords	Sites					
N00245 / 000544	05-24-1996	DTSC LONG BEACH	REPOST OF THE DRAFT CALIFORNIA ENVIRONMENTAL QUALITY ACT NEGATIVE DECLARATION AT LIBRARY FOR PUBLIC REVIEW FOR HAZARDOUS WASTE CLEANUP ACTIVITIES AT SITE 12	ADMIN RECORD	HAZ WASTE	012	B2-B - BECHTEL NATIONAL
NONE	05-10-1996	S. LOWE					
LTR	NONE	NAVSTA SAN DIEGO					SW02082316
NONE	02.7	K. HIGH					IMAGED
00057							SDNS_005
N00245 / 000575	01-15-2002	DTSC, LONG BEACH, CA	PUBLIC NOTICE: DRAFT CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) NEGATIVE DECLARATION FOR THE PROPOSED TIME CRITICAL REMOVAL ACTION	ADMIN RECORD	CEQA	012	B2-B - BECHTEL NATIONAL
NONE	05-10-1996	S. LOWE			PUBNOT		
MISC	NONE	NAVFAC - SOUTHWEST DIVISION			TCRA		SW02082316
NONE							IMAGED
00002							SDNS_005
N00245 / 000548	05-30-1996	NAVSTA SAN DIEGO	RESPONSE TO APRIL 19, 1996 COMMENTS ON THE FACT SHEET REMOVAL ACTION MEMORANDUM REMOVAL ACTION WORK PLAN FOR SITE 12	ADMIN RECORD	ACTMEMO	012	B2-B - BECHTEL NATIONAL
LTR	05-14-1996	L.L. MCLAUGHLIN			RESPONSE		
NONE	NONE	DTSC LONG BEACH					SW02082316
00001	10.1	J. JIMINEZ					IMAGED
							SDNS_004
N00245 / 000539	05-22-1996	BECHTEL NATIONAL, INC.	PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT FOR THE BRINSER STREET PARKING AREA - INCLUDES REVISED COVER PAGE AND REVISED SECTION 8	ADMIN RECORD	SI	012	B2-B - BECHTEL NATIONAL
CTO-0011/0207	05-15-1996	M. KARIMI					000-00-0000
RPT	00011	NAVFAC - SOUTHWEST DIVISION					SW02082315
N68711-92-D-4670	01.2						IMAGED
00481							SDNS_009
N00245 / 000537	05-22-1996	DTSC LONG BEACH	COMMENTS ON THE PRELIMINARY FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/REMOVAL ACTION WORK PLAN FOR SITE 12	ADMIN RECORD	COMMENTS	012	BECHTEL NATIONAL
LTR	05-17-1996	J.M. JIMINEZ			REMOVAL		
NONE	NONE	NAVSTA SAN DIEGO			TCRA		SW02011018
00005	02.7	T.L. MORLEY					
N00245 / 000543	05-23-1996	OHM	PRE FINAL REMOVAL ACTION WORK PLAN SITE 12 (AMENDMENT TO FINAL SITE RSE WORK PLAN) (SEE AR #520 - FINAL SITE RSE WORK PLAN)	ADMIN RECORD	REMOVAL	012	BECHTEL NATIONAL
SW1664	05-20-1996	REMEDATION					
PLAN	DO 21						
N6871193D1459	02.1	DTSC LONG BEACH					SW02011018
00450							

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	FRC Access. No.	Box No.	CD No.
N00245 / 000538					05-22-1996		DTSC LONG BEACH				COMMENTS ON THE PRELIMINARY FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/REMOVAL ACTION WORK PLAN FOR SITE 12 OF APRIL 4, 1996 (COMMENTS FROM GSU)	ADMIN RECORD	COMMENTS REMOVAL TCRA	012	B2-B - BECHTEL NATIONAL			
LTR					05-21-1996		J.M. JIMENEZ									000-00-0000		
NONE					02.7		NAVSTA SAN DIEGO									SW02082315		IMAGED
00008							T.L. MORLEY									SDNS_005		
N00245 / 000571					08-02-1996		DTSC LONG BEACH				COMMENTS ON SCOPE OF WORK FOR FIELD SERVICES IN SUPPORT OF THE ENVIRONMENTAL SITE ASSESSMENT FOR IR SITE 12, NAVSTA SAN DIEGO.(WIENCLOSURE.)	ADMIN RECORD	COMMENTS SA	012	BECHTEL NATIONAL			
LTR					05-23-1996		J.JIMENEZ											
NONE					02.7		NAVSTA SAN DIEGO									SW02011019		
00014							CO/T. MORLEY											
N00245 / 000549					08-06-1996		OHM REMEDIATION				FINAL REMOVAL ACTION WORK PLAN IR SITE 12	ADMIN RECORD	REMOVAL RSE	012	BECHTEL NATIONAL			
PLAN					06-03-1996		M.S. KYLLO											
N68711-93-D-1459					DO 21		NAVSTAC - SOUTHWEST DIVISION									SW02011019		
00250					03.3													
N00245 / 000550					08-06-1996		NAVSTAC - SOUTHWEST DIVISION				FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/REMOVAL ACTION WORK PLAN SITE 12 (SIGNED JUNE 6, 1996)	ADMIN RECORD	ACTMEMO REMOVAL TCRA	012	B2-B - BECHTEL NATIONAL			
PLAN					06-05-1996													
N6871192D4670					00083											SW02082316		IMAGED
00161					02.5		NAVSTA SAN DIEGO									SDNS_004		
N00245 / 000567					08-02-1996		NAVSTAC - SOUTHWEST DIVISION				MAY 2 1996 MINUTES AND RESPONSE TO COMMENTS. ALSO ENCLOSED MAY 17, 1996 AND MAY 21, 1996, RESPONSE TO COMMENTS IN RESPONSE TO LTR. FROM DTSC.	ADMIN RECORD	MTG MINS RESPONSE	012	B2-B - BECHTEL NATIONAL			
LTR					06-05-1996		K. E. REYNOLDS											
NONE					NONE		DTSC LONG BEACH									SW02082316		IMAGED
00023					02.5		J. JIMENEZ									SDNS_005		

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	
		Classification	Keywords
			Sites
N00245 / 000556	08-02-1996 06-06-1996	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD ACTMEMO REMOVAL 012
LTR NONE 00002	NONE 02.5	J. PAWLISCH NAVSTA SAN DIEGO CO	SW02082316 IMAGED SDNS_005
N00245 / 000556	06-24-1996 06-07-1996	OHM REMEDIATION G. JAMES VARIOUS AGENCIES	ADMIN RECORD MTG MINS REMOVAL WORK PLAN 012
MM N68711-93-D-1459 00006	DO 21 01.6		B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_004
N00245 / 000554	06-24-1996 06-10-1996	CRWQCB SAN DIEGO J.P. ANDERSON NAVSTA SAN DIEGO T.L. MORLEY	ADMIN RECORD COMMENTS ESI 012
LTR NONE 00002	NONE 01.6		SW02011019
N00245 / 000560	06-26-1996 06-10-1996	NAVFAC - SOUTHWEST DIVISION K. REYNOLDS DTSC LONG BEACH J. JIMENEZ	ADMIN RECORD TCRA 012
LTR NONE 00004	NONE 02.5		B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_004
N00245 / 000567	06-24-1996 06-14-1996	CRWQCB SAN DIEGO J.P. ANDERSON NAVSTA SAN DIEGO T.L. MORLEY	ADMIN RECORD 012
LTR NONE 00002	NONE 01.6		B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_004
N00245 / 000558	06-24-1996 06-14-1996	DTSC LONG BEACH J.E. SCANDURA NAVSTA SAN DIEGO T.L. MORLEY	ADMIN RECORD REMOVAL 012
LTR NONE 00002	NONE 01.6		B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_004

Monday, September 13, 2004

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UIC No. / Rec. No.

Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location	FRC Access. No.	Box No.	CD No.
N00245 / 000485	NONE			03-29-2002	06-18-1996	DTSC, LONG BEACH, CA	J. JIMENEZ	NAVAL STATION, SAN DIEGO, CA	T. MORLEY	DTSC TRANSMITTAL OF CRWQCB'S COMMENTS ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT - BRINSER STREET PARKING AREA (WITH ENCLOSURES) (SEE AR #539 - REPORT & #548 - DEPT. OF THE NAVY LETTER)	ADMIN RECORD	COMMENTS ESI	012	B2-B - BECHTEL NATIONAL			
N00245 / 000555	LTR			06-24-1996	06-18-1996	DTSC LONG BEACH	J.M. JIMENEZ	NAVSTA SAN DIEGO		COMMENTS ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT FOR SITE 12 DTSC COMMENTS TO BE FORWARDED AT A LATER DATE	ADMIN RECORD	COMMENTS ESI	012	B2-B - BECHTEL NATIONAL	SW02082314 IMAGED SDNS_008		
N00245 / 000386	NONE			03-19-2002	06-26-1996	NAVFAC - SOUTHWEST DIVISION				INFORMATION MATERIALS FROM THE RESTORATION ADVISORY BOARD MEETING HELD ON 26 JUNE 1996 - INCLUDES MEETING MINUTES, PRELIMINARY FINAL TIME-CRITICAL REMOVAL ACTION MEMORANDUM/REMEDIAL ACTION PLAN AND SIGN-IN SHEETS (SEE AR #885 - DRAFT AGENDA (REV. 1))	ADMIN RECORD CONFIDENTIAL	MTG MINS PAH PCB SOIL	003 012	B2-B - BECHTEL NATIONAL			
N88711-92-D-4670 00026						NAVFAC - SOUTHWEST DIVISION									SW02082313 IMAGED SDNS_008		
N00245 / 000574	LTR			08-02-1996	06-27-1996	BNI SAN DIEGO	W.L. SHIPMAN	NAVFAC - SOUTHWEST DIVISION	PAUL KENNEDY	RESPONSE TO INITIAL COMMENTS FROM RWQCB ON THE PRELIMINARY FINAL ESI FOR SITE 12, AND UPDATED TABLE 5-1 OF PRELIMINARY FINAL ESI REPORT	ADMIN RECORD	ESI RESPONSE	012	B2-B - BECHTEL NATIONAL			
N00245 / 000486	SWDIV SER 1822.KB/586			03-29-2002	07-05-1996	NAVFAC - SOUTHWEST DIVISION	K. REYNOLDS	CRWQCB, SAN DIEGO, CA	M. HUMPHRIES	NAVY'S RESPONSE TO INITIAL COMMENTS ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT - BRINSER STREET PARKING AREA (WITH ENCLOSURES) (SEE AR #539 - REPORT)	ADMIN RECORD	COMMENTS ESI	012	B2-B - BECHTEL NATIONAL	SW02082316 IMAGED SDNS_005		
	LTR														SW02082314 IMAGED SDNS_008		

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

Page 15 of 29

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRG Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000645	11-08-1996 08-09-1996	NAVFAC - SOUTHWEST DIVISION	CHAIN OF CUSTODY RECORDS FOR SITE 12 WENCLS
LTR	NONE	R. BASINET	ADMIN RECORD
NONE	01.6	CRWQCB SAN DIEGO	LAB
00020		M. HUMPHRIES	012
			B2-B - BECHTEL NATIONAL
			SW02082317 IMAGED SDNS_005
N00245 / 000623	09-18-1996 08-26-1996	DTSC LONG BEACH	COMMENTS ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT, SITE 12 - INCLUDES GSU MEMO DATED 22 JULY 1996 AND OSA MEMO DATED 19 JULY 1996 AS ENCLOSURES (SEE AR #539 - PRELIMINARY FINAL ESI)
LTR	NONE	J. JIMENEZ	ADMIN RECORD
NONE	10.1	NAVSTA SAN DIEGO	BRINSER STREET COMMENTS
00032		T. MORLEY	SI
			012
			B2-B - BECHTEL NATIONAL
			SW02082316 IMAGED SDNS_010
N00245 / 000627	09-26-1996 09-10-1996	BN SAN DIEGO	FINAL BACKGROUND STUDY REPORT (SEE AR #758 - ADDENDUM TO FINAL REPORT; AR #756 - RESPONSE TO COMMENTS)
NONE		R. CUMMINS	ADMIN RECORD
RPT	00089	NAVFAC - SOUTHWEST DIVISION	BACKGROUND IRP
N68711-92-D-4670	01.1		003
00132			009
			SEDIMENTS
			012
			SW02082317 IMAGED SDNS_008
N00245 / 000743	11-13-1997 10-08-1996	OHM REMEDIATION E. TIFFANY	DRAFT PROJECT CLOSURE REPORT, REVISION 0
SW2233			ADMIN RECORD
RPT	DO 0021	NAVFAC - SOUTHWEST DIVISION	CLOSURE IRP
N68711-93-D-1459	01.2		012
00672			PA PAH PID PVC
			SW02110701 IMAGED SDNS_011
N00245 / 000780	03-06-1998 01-29-1997	DTSC LONG BEACH	COMMENTS ON THE DRAFT PROJECT CLOSURE REPORT FOR THE BRINSER STREET PARKING AREA
LTR	NONE	J. JIMENEZ	ADMIN RECORD
NONE	10.1	NAVSTA SAN DIEGO	CLOSURE COMMENTS
00006		T. MORLEY	012
			B2-B - BECHTEL NATIONAL
			000-00-0000 SW02082320 IMAGED SDNS_008
N00245 / 000788	03-06-1998 02-06-1997	DTSC LONG BEACH	COMMENTS ON DRAFT CLOSURE REPORT FOR THE BRINSER STREET PARKING AREA
LTR	NONE	J. JIMENEZ	ADMIN RECORD
NONE	10.1	VARIOUS AGENCIES	CLOSURE COMMENTS
00007			012
			B2-B - BECHTEL NATIONAL
			000-00-0000 SW02082320 IMAGED SDNS_008

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.					Prc. Date	Author Affil.	Subject		Classification	Keywords	Sites	Location		
Doc. Control No.	Record Type	Contrl./Guid. No.	Approx. # Pages	Record Date	Author	Recipient Affil.	Recipient					FRC Access. No.	Box No.	CD No.
N00245 / 000512	NONE			04-05-2002	BECHTEL NATIONAL, INC.			RESPONSE TO DTSC COMMENTS ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT, SITE 12 - BRINSER STREET PARKING AREA (SEE AR #539 - PRELIMINARY FINAL ESI & #769 - COMMENTS ON BECHTEL'S RESPONSE TO DTSC COMMENTS)	ADMIN RECORD	COMMENTS ESI	012	B2-B - BECHTEL NATIONAL		
MISC				02-10-1997								000-00-0000		
N68711-92-D-4670				00011	NAVFAAC - SOUTHWEST DIVISION							SW02082315	IMAGED	
00035												SDNS_010		
N00245 / 000684				04-22-1997	BECHTEL NATIONAL, INC.			RESPONSE TO COMMENTS FROM DTSC ON THE PRELIMINARY FINAL EXPANDED SITE INSPECTION FOR THE BRINSER STREET PARKING AREA (SEE AR #539 - PRELIMINARY FINAL ESI, #623 - DTSC COMMENTS & #789 - DTSC COMMENTS ON RESPONSE TO COMMENTS)	ADMIN RECORD	COMMENTS RESPONSE SI SOIL	012	B2-B - BECHTEL NATIONAL		
CTO-0011/0271				03-04-1997	J. BAILEY							SW02082317	IMAGED	
MISC				00011	NAVFAAC - SOUTHWEST DIVISION							SDNS_005		
N68711-92-D-4670				10.1										
00037														
N00245 / 000769				03-04-1998	DTSC SACRAMENTO			COMMENTS ON SECTION 5 - RISK ASSESSMENT AND DTSC COMMENTS ON BECHTEL'S RESPONSE TO COMMENTS ON PRELIMINARY FINAL EXPANDED SITE INSPECTION (SEE AR #512 - RESPONSE TO DTSC COMMENTS & 539 - PRELIMINARY FINAL ESI)	ADMIN RECORD	ASSESSMENT BACKGROUND COMMENTS INORG IR REMOVAL RESPONSE RISK	012	B2-B - BECHTEL NATIONAL		
NONE				04-17-1997	B. DAVIS							000-00-0000		
MEMO				NONE	DTSC LONG BEACH							SW02082320	IMAGED	
NONE				01.6										
00006					D. BAUTISTA							SDNS_010		
N00245 / 000789				03-06-1998	DTSC LONG BEACH			COMMENTS ON BECHTEL RESPONSE TO DTSC COMMENTS ON PRELIMINARY FINAL EXPANDED SITE INSPECTION REPORT FOR THE BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS RESPONSE SI	012	B2-B - BECHTEL NATIONAL		
FAX				05-13-1997	D. BAUTISTA							000-00-0000		
NONE				NONE	NAVFAAC - SOUTHWEST DIVISION							SW02082320	IMAGED	
00014				10.1	T. MORLEY							SDNS_010		
N00245 / 000748				11-13-1997	OHM REMEDIATION			FINAL PROJECT CLOSURE REPORT, REVISION 0 (REVISION 0, CONSISTS OF REPLACEMENT PAGES ONLY)	ADMIN RECORD	CLOSURE IR PAH PID PVC	012	P3-C - BECHTEL NATIONAL		
SW3746.0				06-03-1997	E. TIFFANY							SW02110701	IMAGED	
RPT				DO 0021	NAVFAAC - SOUTHWEST DIVISION							SDNS_011		
N68711-93-D-1459				01.2										
00048														

UIC No. / Rec. No.	Doc. Control No.	Pr. Date	Author Affil.	Location FRC Access. No. Box No. CD No.
Record Type	Record Date	Author		
Contr./Guid. No.	CTO No.	Recipient Affil.		
Approx. # Pages	EPA Cat. #	Recipient	Subject	Classification
				Keywords
				Sites
N00245 / 000736	09-18-1997	OHM	FINAL PROJECT CLOSURE REPORT,	ADMIN RECORD
SW03746.1	06-12-1997	REMEDICATION	REVISION 1 (REVISION 1, CONSISTS OF	ARAR
RPT	DO 0021	E. TIFFANY	REPLACEMENT PAGES ONLY)	CLOSURE
N68711-93-D-1459	02.0	NAVFAC -		IR
00010		SOUTHWEST		RESULTS
		DIVISION		RISK
		D. JESPERSEN		SOIL
				TCRA
N00245 / 000795	03-09-1998	NAVSTA SAN	COMMENTS TO RESPONSES TO DTSC	COMMENTS
	09-24-1997	DIEGO	COMMENTS ON PRELIMINARY FINAL	RESPONSE
MISC	00011	T. MORLEY	EXPANDED SITE INSPECTION REPORT	SI
NCNE	10.1	CRWQCB SAN	SITE 12 (VARIOUS DATES)	
00028		DIEGO		
		L. WALSH		
N00245 / 000010	08-24-1999	BECHTEL	COMPILED RESPONSE TO DTSC	ADMIN RECORD
CTO-0011/0321	10-20-1997	NATIONAL, INC.	COMMENTS ON THE RESPONSES TO	COMMENTS
MISC	00011	J. BAILEY	ORIGINAL COMMENTS ON THE	RESPONSE
N68711-92-D-4670	10.1	NAVFAC -	PRELIMINARY FINAL EXPANDED SITE	SI
00025		SOUTHWEST	INSPECTION REPORT (SEE AR #789 - DTSC	
		DIVISION	COMMENTS ON RESPONSES & #539 - PRE-	
		C. HERNANDEZ	FINAL ESI)	
N00245 / 000785	03-06-1998	NAVFAC -	DECEMBER 16, 1997, PROJECT REVIEW	ADMIN RECORD
	12-16-1997	SOUTHWEST	MEETING MINUTES, NOVEMBER 20, 1997,	MTG MINS
MM	NONE	DIVISION	MONTHLY STATUS MEETING MINUTES,	001
NCNE	10.4	MEMBERS	AND APPROACH FOR ADDITIONAL SOIL	004
00006			SAMPLING	007
				012
N00245 / 000830	12-07-1998	BECHTEL	FINAL EXPANDED SITE INSPECTION	ADMIN RECORD
CTO-0011/0305	02-18-1998	NATIONAL, INC.	REPORT FOR THE BRINSER STREET	DATA
RPT	00011	J. BAILEY	PARKING AREA, VOLUMES 1 & 2 (SEE AR	ESI
N68711-92-D-4670	01.3	NAVFAC -	#854 - ERRATA SHEETS)	GW
01185		SOUTHWEST		METALS
		DIVISION		NFA
				RA
				SOIL
				UST

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location	
											FRC Access. No. Box No. CD No.	
N00245 / 000808					07-14-1998 05-12-1998 NONE 01.6	CRWQCB SAN DIEGO L. WALSH NAVSTA SAN DIEGO T. MORLEY	REVIEW OF RESPONSE TO COMMENTS TO SDRWQCB COMMENTS ON FINAL EXPANDED SITE INSPECTION REPORT SITE 12, DATED FEBRUARY 1998; NO FURTHER COMMENTS	ADMIN RECORD	COMMENTS RESPONSE SI	012	B2-B - BECHTEL NATIONAL  SW02082321 IMAGED SDNS_005	
N00245 / 000018					08-24-1999 06-16-1998 NONE 03.6	NAVSTA SAN DIEGO L. MCLAUGHLIN DTSC CYPRESS D. BAUTISTA	REQUEST FOR CONCURRENCE FOR NO FURTHER REMEDIAL ACTION PLANNED (NFRAP)	ADMIN RECORD	NFRAP	012	B2-B - BECHTEL NATIONAL  SW02082301 IMAGED SDNS_002	
N00245 / 000803					07-13-1998 06-17-1998 00011 10.1	BECHTEL NATIONAL, INC. J. BAILEY NAVFAC - SOUTHWEST DIVISION	RESPONSE TO DRAFT COMMENTS FROM B. DAVIS OF DTSC, DTD MAY 11, 1998 & G. SWELL OF DTSC, DTD JUNE 3, 1998 ON THE FINAL EXPANDED SITE INSPECTION REPORT, DTD JUNE 1998 (SEE AR #846 - REVISED RESPONSE TO DRAFT COMMENTS & #830 - FINAL ESI)	ADMIN RECORD	COMMENTS RESPONSE SI	012	B2-B - BECHTEL NATIONAL  SW02082321 IMAGED SDNS_010	
N00245 / 000846					12-07-1998 07-02-1998 00011 10.1	BECHTEL NATIONAL, INC. J. BAILEY NAVFAC - SOUTHWEST DIVISION E. DIAS	REVISED RESPONSE TO DRAFT COMMENTS FROM B. DAVIS OF DTSC, DATED MAY 11, 1998, AND G. SWELL OF DTSC, DATED JUNE 3, 1998 ON FINAL EXPANDED SITE INSPECTION REPORT (SEE AR #803 - RESPONSE TO DRAFT COMMENTS & #830 - FINAL ESI)	ADMIN RECORD	COMMENTS ESI GW RESPONSE SEDIMENTS VOC	012	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082321 IMAGED SDNS_010	
N00245 / 000847					12-07-1998 07-09-1998 NONE 10.1	NAVFAC - SOUTHWEST DIVISION K. BEVERLY DTSC LONG BEACH & CRWQCB D. BAUTISTA & L. WALSH	TRANSMITTAL OF REVISED RESPONSE TO DRAFT COMMENTS FROM DTSC, DATED MAY 11, 1998, AND JUNE 3, 1998, ON FINAL EXPANDED SITE INVESTIGATION (SEE AR #846 - REVISED RESPONSE)	ADMIN RECORD	COMMENTS GW RESPONSE SEDIMENTS SI VOC	012	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082321 IMAGED SDNS_010	

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	Record Date	Author	Box No.
Contr./Guid. No.	CTO No.	Recipient Affil.	CD No.
Approx. # Pages	EPA Cat. #	Recipient	
		Subject	Classification
			Keywords
			Sites
N00245 / 000848	12-07-1998 07-23-1998	NAVSTA SAN DIEGO L. MCLAUGHLIN DTSC CYPRESS D. BAUTISTA	ADMIN RECORD CLOSURE COMMENTS MTG MINS RESPONSE RSE 001 002 003 004 007 010 012 013
MISC NONE 00007	NONE 10.1		BECHTEL NATIONAL SW02011028
N00245 / 000854	12-07-1998 08-26-1998	BECHTEL NATIONAL, INC. J. BAILEY NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD ESI GW SOIL UST 012 013
CTO-0011/0305 MISC N68711-92-D-4670 0007	00011 01.2		B2-B - BECHTEL NATIONAL 000-00-0000 SW02082322 IMAGED SDNS_009
N00245 / 000855	12-07-1998 09-04-1998	DTSC CYPRESS J. SCANDURA NAVSTA SAN DIEGO L. MCLAUGHLIN	ADMIN RECORD ESI NFA SOIL 012
LTR NONE 00002	NONE 01.6		CHOICE IMAGING SOLUTIONS SW04081201
N00245 / 000081	08-27-1999 07-06-1999	DTSC D. BAUTISTA NAVFAC - SOUTHWEST DIVISION T. MORLEY	ADMIN RECORD IRP RFA RFI 009 012 014 016 022 030
NONE LTR NONE 00002	NONE 03.6		BECHTEL NATIONAL SW02011002

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification		Keywords		Sites		Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.									FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #		Recipient										CD No.	
N00245 / 000133		10-26-1999		BECHTEL		PRELIMINARY FINAL - CORRELATION OF		ADMIN RECORD		DATA		001		B2-B - BECHTEL	
CTO-0169/0144		09-23-1999		NATIONAL INC		SEDIMENT STUDY TO INSTALLATION		INFO		METALS		002		NATIONAL	
RPT		00169		J. BAILEY		RESTORATION PROGRAM SITES		REPOSITORY		MONITORING		003			
N68711-92-D-4670		01.1		NAVFAC -						PCB		004		SW02082303	
00291				SOUTHWEST						SEDIMENTS		007		IMAGED	
				DIVISION						STORMWATER		008		SDNS_010	
				C. URIAS								009			
												010			
												011			
												012			
												013			
												020			
N00245 / 000218		10-19-2000		BECHTEL		FINAL CORRELATION OF SEDIMENT STUDY		ADMIN RECORD		IRP		001		B2-B - BECHTEL	
CTO-0169/0268		09-29-2000		NATIONAL, INC.		TO INSTALLATION RESTORATION		INFO		PAH		002		NATIONAL	
RPT		00169		P. STANG		PROGRAM SITES DATED SEPTEMBER 2000		REPOSITORY		PCB		003			
N68711-92-D-4670				NAVFAC -						RCRA		004		SW02082308	
00323				SOUTHWEST						RFI		007		IMAGED	
				DIVISION						SITE		008		SDNS_003	
										SWMU		009			
										TPH		010			
										UST		011			
												012			
												013			
												020			
N00245 / 000525		04-26-1996		RAB MEMBER		RAB COMMENTS TO THE SITE 12		MISSING @		BRINSER STREET		012		SOUTHWEST	
LTR		01-01-2001				REMOVAL SITE EVALUATION (RSE)		SWDIV		COMMENTS				DIVISION	
NONE		NONE		NAVFAC -						RAB					
00001		10.1		SOUTHWEST						RSE					
				DIVISION											

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	Classification
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N00245 / 000626	04-26-1996 01-01-2001	RAB MEMBER	SOUTHWEST DIVISION
LTR	NONE	NAVFAC - SOUTHWEST DIVISION	BRINSER STREET RAB RESPONSE RSE
00001	10.1		
N00245 / 000350	03-05-2002	BECHTEL	007
CTO-0196/0094	02-21-2002	NATIONAL, INC.	BECHTEL NATIONAL
MISC	00196	COUNTY OF SD - ENVIRON. HEALTH	GW MW SITE ASSESSMEN WELLS
N68711-92-D-4670			SW02031801
00018			
N00245 / 000351	03-05-2002	BECHTEL	007
CTO-0196/0099	02-26-2002	NATIONAL, INC.	B2-B - BECHTEL NATIONAL
MISC	00196	J. BAILEY	DISPOSAL DRUMS
N68711-92-D-4670		NAVFAC - SOUTHWEST DIVISION	IDWMP METALS MW SOIL WATER WELLS
00006		R. SELBY	SW02082312 IMAGED SDNS_005

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.	Doc. Control No.	Rec. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000871	CTO-0020/0068 & CTO-0020/0092	08-06-2002 07-22-2002	BECHTEL ENVIRONMENTAL, INC.	P. STANG	NAVFAAC - SOUTHWEST DIVISION	FINAL SITE MANAGEMENT PLAN [INCLUDES ARCVIEW AND CAD ELECTRONIC FIGURE FILES ON CDI]	ADMIN RECORD	AOC ARAR AST ATSDR BTEX COC COPC COPEC CRP DRUMS GW HAZ WASTE METALS MW NCP NTCRA ORDNANCE PAH PCB PCE PESTICIDES POL PRG RAB RCRA REMEDIAL ACTIO REMOVAL RFA RFI ROD SMP SOIL SOLVENTS SVE SVOC	001 002 003 004 007 008 010 011 012 013 020 AOC 1 AOC 2 AOC 3 BLDG. 129 BLDG. 130 BLDG. 132 BLDG. 20 BLDG. 290 BLDG. 3302 BLDG. 3322 BLDG. 65 BLDG. 68 BLDG. 86 SWMU 1 SWMU 10 SWMU 11 SWMU 12 SWMU 13 SWMU 14 SWMU 15 SWMU 16 SWMU 17 SWMU 18 SWMU 19	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012



UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #		Recipient						CD No.	
N00245 / 000902		08-23-2002		NAVFAC -		TRANSMITTAL OF SECTION 5 OF THE	ADMIN RECORD	ARSENIC	005	P3-C - BECHTEL	
CTO-0190/0151 &		08-15-2002		SOUTHWEST		DRAFT ECOLOGICAL RISK ASSESSMENT		ERA	007	NATIONAL	
SWDIV SER		00190		DIVISION		FOR THE FORMER SEWAGE TREATMENT		GW	011		
5SEN/DB/174				D. BELTON		PLANT AND THE PROPOSED PLAN FOR		LANDFILL	012	SW03061201	
MISC				DTSC - CYPRESS		THE ADMIRAL BAKER GOLF COURSE		METALS		IMAGED	
N68711-92-D-4670				D. BAUTISTA		LANDFILL, FORMER SEWAGE TREATMENT		NFA		SDNS_012	
00134						PLANT, FRENCH DRAIN, AND BRINSER		PA			
						STREET PARKING AREA		PAH			
								PCB			
								PIM			
								PROPOSED PLAN			
								REMEDIAL ACTIO			
								Ri			
								ROD			
								RSE			
								SI			
								SOIL			
								SVOC			
								TPH			
								VOC			
								COMMENTS	005	P3-C - BECHTEL	
N00245 / 000919		10-16-2002		SAN DIEGO		NOTICE INVITING PUBLIC COMMENT ON	ADMIN RECORD	GW	007	NATIONAL	
NONE		08-29-2002		UNION-TRIBUNE		THE PROPOSED PLAN FOR NO FURTHER		HAZ MAT	011		
MISC		NONE		GENERAL PUBLIC		ACTION AT THE ADMIRAL BAKER GOLF		NFA	012	SW03061201	
NONE						COURSE, FORMER SEWAGE TREATMENT		PROPOSED PLAN		IMAGED	
00002						PLANT, FRENCH DRAIN, AND BRINSER		REMOVAL		SDNS_012	
						STREET PARKING AREA WITH INVITATION		RISK			
						TO PRESENTATION AND DISCUSSION		SOIL			
						MEETING ON 18 SEPTEMBER					



UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
	N00245 / 000384				10-08-2002		BECHTEL	BECHTEL			MATERIALS FROM THE PUBLIC MEETING REGARDING THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA W/ATTACHMENTS	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COMMENTS PIM PROPOSED PLAN	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
	CTO-0013/0121				09-18-2002		ENVIRONMENTAL, INC.	ENVIRONMENTAL, INC.							
	MISC				00013										
	N68711-95-D-7526						NAVFAC -	NAVFAC -							
	00031						SOUTHWEST	SOUTHWEST							
							DIVISION	DIVISION							
	N00245 / 000912				09-17-2002		BECHTEL	BECHTEL			PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA - NAVY PROPOSES NO FURTHER ACTION (WRITTEN IN BOTH ENGLISH AND SPANISH)	ADMIN RECORD INFO REPOSITORY	AIR ARSENIC BGS CANCER GW LF METALS NCP NFA PA PAH PCB PROPOSED PLAN REMEDIAL ACTIO	005 007 011 012 BLDG. 3053	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
	CTO-0013/0122				09-26-2002		ENVIRONMENTAL, INC.	ENVIRONMENTAL, INC.							
	PLAN				00013										
	N68711-95-D-7526						NAVFAC -	NAVFAC -							
	00017						SOUTHWEST	SOUTHWEST							
							DIVISION	DIVISION							



UIC No. / Rec. No.		Prc. Date		Author Affil.		Location	
Doc. Control No.	Record Type	Record Date	Author	Author	Recipient Affil.	FRC Access. No.	Box No.
Contr./Guid. No.	Approx. # Pages	CTO No.	Recipient	Recipient	Subject	Classification	Keywords
EPA Cat. #							CD No.





**PUBLIC PARTICIPATION DOCUMENTS FOR  
NO ACTION SITES**



NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

PUBLIC PARTICIPATION DOCUMENTS FOR SITE 5

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000262	NONE	11-29-2001	DEPARTMENT OF THE ARMY	C. MYERS	INTERESTED PARTIES	RECORD OF DECISION FOR THE FEASIBILITY STUDY OF REMEDIAL ACTION ALTERNATIVES FOR CONVENTIONAL EXPLOSIVE ORDNANCE ITEMS ON THE FORMER CAMP ELLIOT (SEE AR #261 - FS, EIS)	ADMIN RECORD INFO REPOSITORY	EIS EOD FS NEPA ORDNANCE REMEDIAL ACTIO ROD	005 006 SUB-AREA A SUB-AREA B SUB-AREA C SUB-AREA D SUB-AREA E SUB-AREA F	B2-B - BECHTEL NATIONAL SW02082309 IMAGED SDNS_004
N00245 / 000540	RPT N62474-88-D-5086 00128	05-22-1996 03-25-1992 NONE 01.1	PRC ENVIRONMENTAL MGMT R. JAIN US EPA - WASHINGTON DC			DRAFT PUBLIC WORKS CENTER RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT SITES 1, 2, 3, 4, 5 [EPA ID# CA6170024289]	ADMIN RECORD	BASIN RCRA RFA SALVAGE YARD	001 002 003 004 005	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_011
N00245 / 000305	R09039 MISC N62474-88-D-5086 00131	06-11-2002 04-21-1992 NONE	PRC ENVIRONMENTAL MGMT R. JAIN US EPA - WASHINGTON, DC F. MOORE			FINAL PUBLIC WORKS CENTER RESOURCE, CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT (EPA ID #CA6170024289)	ADMIN RECORD	AIR CLOSURE GW HWSA PCB PR RCRA RFA SOIL SWMU TSCA VSI WATER	001 002 003 004 005 BLDG. 129 BLDG. 132 BLDG. 3302 BLDG. 3322 BLDG. 65 BLDG. 68	B2-B - BECHTEL NATIONAL SW02082311 IMAGED SDNS_010

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			
N00245 / 000576	08-02-1996 03-01-1996	NAVSTA SAN DIEGO	FACT SHEET #5 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH & SPANISH), IRP HELPS DRIVE THE CLEANUP ACTIVITY (PORTION OF MAILING LIST IS CONFIDENTIAL)
DATA NONE 00014	NONE 10,6	PUBLIC INTEREST	ADMIN RECORD CONFIDENTIAL
			BASIN DPDO HAZ WASTE PUBNOT SALVAGE YARD
			001 002 003 004 005 007 008 009 010 011 012 013
			B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_005
N00245 / 000714	07-30-1997 07-01-1997	NAVSTA SAN DIEGO	FACT SHEET NO. 6 - ENVIRONMENTAL CLEANUP PROGRAM (PORTION OF MAILING LIST IS CONFIDENTIAL)
MISC NONE 00022	NONE 10,6	PUBLIC	ADMIN RECORD CONFIDENTIAL
			PCB RAB
			001 002 003 004 005 006 007 008 009 011 012
			B2-B - BECHTEL NATIONAL SW02082318 IMAGED SDNS_008

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location
Record Type	Record Date	Author	Recipient					FRC Access. No.
Contr./Guid. No.	CTO No.	Recipient Affil.						Box No.
Approx. # Pages	EPA Cat. #							CD No.
N00245 / 000037	08-26-1999	NAVSTA SAN		OCTOBER 28, 1998 RESTORATION	ADMIN RECORD	LF	001	B2-B - BECHTEL
NONE	10-28-1998	DIEGO RAB		ADVISORY BOARD MEETING MINUTES		MTG MINS	002	NATIONAL
MISC	NONE					PCB	003	
NONE	10.4	RAB MEMBERS				RAB	004	SW02082301
00004						RSE	005	IMAGED
							006	SDNS_002
							007	
							008	
							009	
							010	
							011	
							012	
							013	
N00245 / 000183	08-09-2000	BECHTEL		DRAFT RECORD OF DECISION/REMEDIAL	ADMIN RECORD	COC	005	B2-B - BECHTEL
CTO-0190/0022	12-01-1999	NATIONAL INC.		ACTION PLAN (ROD/RAP) FOR NO ACTION		GW	011	NATIONAL
PLAN	00190			SITES		IAS	BLDG. 3053	
N68711-92-D-4670		NAVFAC -				LF	BLDG. 3149	SW02082308
00129		SOUTHWEST				MW		IMAGED
		DIVISION				NFA		SDNS_003
						PCB		
						PRG		
						PVC		
						RAB		
						RAP		
						RCRA		
						REMEDIAL ACTIO		
						ROD		
						SOIL		
						SVOC		
						SWAT		
						SWMU		
						TPH		
						TRPH		
						UST		
						VOC		



UIC No. / Rec. No.		Proc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #		Recipient						CD No.	
N00245 / 000451		05-08-2002		BECHTEL		PROOF OF PUBLICATION, IN STAR-NEWS,	ADMIN RECORD	ASBESTOS	001	B2-8 - BECHTEL	
CTO-0013/0071		05-03-2002		ENVIRONMENTAL,		OF FACT SHEET NO. 9 - ENVIRONMENTAL	INFO	FACT SHEET	002	NATIONAL	
MISC		00013		INC.		CLEANUP PROGRAM (SEE AR #638 - FACT	REPOSITORY	FS	002A		
N68711-95-D-7526				NAVFAC -		SHEET NO. 9)		GW	003	SW02082314	
00004				SOUTHWEST				IRP	004	IMAGED	
				DIVISION				METALS	005	SDNS_011	
								ORDNANCE	006		
								PCB	007		
								PIM	008		
								PUBNOT	009		
								RAB	010		
								REMEDIAL ACTIO	011		
								REMOVAL	012		
								RI	013		
								RSE	020		
								SOIL			
								SVOC			
								TCRA			
								VOC			

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	
		Classification	Keywords
			Sites
N00245 / 000902	08-23-2002	NAVFAC - SOUTHWEST DIVISION	005 P3-C - BECHTEL NATIONAL
CTO-0190/0151 & SWDIV SER	08-15-2002		007 ERA
55EN,DB/174	00190	D. BELTON	011 GW
MISC		DTSC - CYPRESS	012 LANDFILL
N68711-92-D-4670		D. BAUTISTA	METALS
00134			NFA
		TRANSMTTAL OF SECTION 5 OF THE DRAFT ECOLOGICAL RISK ASSESSMENT FOR THE FORMER SEWAGE TREATMENT PLANT AND THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE LANDFILL, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	PA
			PAH
			PCB
			PIM
			PROPOSED PLAN
			REMEDIAL ACTIO
			RI
			ROD
			RSE
			SI
			SOIL
			SVOC
			TPH
			VOC
			COMMENTS
			005 GW
			007 HAZ MAT
			011 NFA
			012 PROPOSED PLAN
			REMOVAL
			RISK
			SOIL
N00245 / 000919	10-16-2002	SAN DIEGO UNION-TRIBUNE	005 P3-C - BECHTEL NATIONAL
NONE	08-29-2002		007 GW
MISC	NONE	GENERAL PUBLIC	011 HAZ MAT
NONE			012 NFA
00002		NOTICE INVITING PUBLIC COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVATATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	012 PROPOSED PLAN
			REMOVAL
			RISK
			SOIL

Monday, September 13, 2004

This Administrative Record (AR) index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location
Record Type	Contr./Guid. No.	Record Date	CTO No.	EPA Cat. #	Reciprocity					FRC Access. No. Box No. CD No.
N00245 / 000903	NONE	09-11-2002	THE STAR-NEWS	GENERAL PUBLIC		PROOF OF PUBLICATION OF PROPOSED PLAN RELEASED FOR PUBLIC COMMENT FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS ERA GW NFA PA PROPOSED PLAN PUBNOT REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC VOC WATER	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
N00245 / 000918	NONE	10-16-2002	EL MEXICANO	GENERAL PUBLIC		PUBLIC NOTICE COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	CLOSURE COMMENTS GW HAZ MAT NFA PROPOSED PLAN PUBNOT RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012



UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No. CD No.
N00245 / 000384	CTO-0013/0121	10-08-2002	09-18-2002	BECHTEL ENVIRONMENTAL, INC.	BECHTEL ENVIRONMENTAL, INC.	MATERIALS FROM THE PUBLIC MEETING REGARDING THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSEY STREET PARKING AREA W/ATTACHMENTS	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COMMENTS PIM PROPOSED PLAN	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012	
N00245 / 000912	CTO-0013/0122	09-17-2002	09-25-2002	BECHTEL ENVIRONMENTAL, INC.	BECHTEL ENVIRONMENTAL, INC.	PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSEY STREET PARKING AREA - NAVY PROPOSES NO FURTHER ACTION (WRITTEN IN BOTH ENGLISH AND SPANISH)	ADMIN RECORD INFO REPOSITORY	AIR ARSENIC BGS CANCER GW LF METALS NCP NFA PA PAH PCB PROPOSED PLAN REMEDIAL ACTIO RI ROD RSE SI SOIL SOLVENTS SVOC TPH VOC WATER	005 007 011 012 BLDG. 3053	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Record Date	CTO No.	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000923		10-24-2002	LEE & ASSOCIATES		10-07-2002				TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON- CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE		NONE	N. LEE										
MISC			NAVAFAC - SOUTHWEST DIVISION										
00004													
N00245 / 000928		11-05-2002	RAB MEMBER		10-18-2002				LETTER FROM A RESTORATION ADVISORY BOARD MEMBER EXPRESSING APPROVAL OF THE CLEANUP EFFORTS AT THE ACTIVITY	ADMIN RECORD	PIM RAB	001 002 004 005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE			C. WOEMPNER										
LTR			NAVSTA SAN DIEGO										
NONE			D. KEMP										
00003													
N00245 / 000935		12-02-2002	LEE & ASSOCIATES		11-19-2002				TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 30 OCTOBER 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	DATA GW METALS MONITORING MTG MINS NFA PRG PROPOSED PLAN QA QC RAB UST WELLS	005 007 008 011 012 BLDG. 3 BLDG. 4 BLDG. 5 BLDG. 6 BLDG. 7	P3-C - BECHTEL NATIONAL SW03061202 IMAGED SDNS_012
NONE			N. LEE										
MM			NAVAFAC - SOUTHWEST DIVISION										
NONE													
00046													
N00245 / 000947		03-20-2003	NAVAFAC - SOUTHWEST DIVISION		01-14-2003				LETTER IN RESPONSE TO DTSC'S LETTER OF 16 SEPTEMBER 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP SITE 7	ADMIN RECORD INFO REPOSITORY		005 007 011 012	P3-C - BECHTEL NATIONAL SW03061202 IMAGED SDNS_012
SWDIV SER			D. KEMP										
N46MS/0048			DTSC - CYPRESS J. SCANDURA										
LTR													
NONE													
00004													

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These  
bibliographic citations are considered to be part of this AR but may not be cited separately in the index.



UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	Classification
			Keywords
			Sites

Total Estimated Record Page Count: 1,131

Total - Administrative Records: 26

((SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or SUBJECT Like "TRC" Or SUBJECT Like "FACT SHEET" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESTORATION ADVISORY BOARD" Or SUBJECT Like "RAB" Or SUBJECT Like "PUBLIC" Or SUBJECT Like "NEWS" Or SUBJECT Like "RECORD OF DECISION" Or SUBJECT Like "ROD" Or SUBJECT Like "RESPONSIVENESS SUMMARY" Or SUBJECT Like "LOCAL REUSE AUTHORITY" Or SUBJECT Like "LRA" Or SUBJECT Like "WORKSHOP" Or SUBJECT Like "NOTICE" Or SUBJECT Like "NEWSPAPER" Or SUBJECT Like "HEARING" Or SUBJECT Like "LOCAL REDEVELOPMENT AUTHORITY") AND IJIC NUMBER=N00245'

No Keywords

Sites=005

No Classification







NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

PUBLIC PARTICIPATION DOCUMENTS FOR SITE 7

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000378		08-07-1995 05-31-1995 NONE 10.4				MAY 31, 1995 RAB MEETING MINUTES	ADMIN RECORD	BASIN MTG MINS RAB SALVAGE YARD	001 002 003 007 008 012	B2-B - BECHTEL NATIONAL  SW02082312 IMAGED SDNS_004
N00245 / 000428		10-31-1995 08-30-1995 NONE 10.3	NAVFAC - SOUTHWEST DIVISION			AUGUST 30, 1995 RESTORATION ADVISORY BOARD MEETING MINUTES AND AGENDA	ADMIN RECORD	BASIN MTG MINS RAB SALVAGE YARD	001 002 003 007 008 012	B2-B - BECHTEL NATIONAL  SW02082314 IMAGED SDNS_004
N00245 / 000364		03-07-2002 02-28-1996 NONE	NAVSTA SAN DIEGO			MINUTES OF RESTORATION ADVISORY BOARD MEETING	ADMIN RECORD	AOPC AST FUEL GW IRP MTG MINS MW PIM RAB RSE SOIL SOLVENTS WELLS WORK PLAN	001 002 003 004 007 008 012 013 017	B2-B - BECHTEL NATIONAL  SW02082312 IMAGED SDNS_004

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	
		Classification	Keywords
			Sites
N00245 / 000576	08-02-1996 03-01-1996	NAVSTA SAN DIEGO	FACT SHEET #5 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH & SPANISH), IRP HELPS DRIVE THE CLEANUP ACTIVITY (PORTION OF MAILING LIST IS CONFIDENTIAL)
DATA	NONE		ADMIN RECORD CONFIDENTIAL
NONE	10.6	PUBLIC INTEREST	BASIN DPDO HAZ WASTE PUBNOT SALVAGE YARD
00014			001 B2-B - BECHTEL 002 NATIONAL 003 004 SW02082316 005 IMAGED 007 SDNS_005
			008 009 010 011 012 013
N00245 / 000387	03-19-2002 04-24-1996	DTSC, LONG BEACH, CA	DTSC COMMENTS TO THE NAVY'S RESPONSES TO RAB COMMENTS
NONE	NONE	J. JIMENEZ	ADMIN RECORD C&D RAB
LTR		NAVFAC - SOUTHWEST DIVISION	001 B2-B - BECHTEL 007 NATIONAL
NONE		T. MORLEY	SW02082313 IMAGED SDNS_010
00005			
N00245 / 000714	07-30-1997 07-01-1997	NAVSTA SAN DIEGO	FACT SHEET NO. 6 - ENVIRONMENTAL CLEANUP PROGRAM (PORTION OF MAILING LIST IS CONFIDENTIAL)
MISC	NONE		ADMIN RECORD CONFIDENTIAL
NONE	10.6	PUBLIC	PCB RAB
00022			001 B2-B - BECHTEL 002 NATIONAL 003 004 SW02082318 005 IMAGED 006 SDNS_008
			007 008 009 011 012

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000807	MISC NONE 00009	07-14-1998 04-01-1998 NONE 01.1	NAVSTA SAN DIEGO ENVIRONMENTAL PR PUBLIC			FACT SHEET NO. 7 - ENVIRONMENTAL CLEANUP PROGRAM	ADMIN RECORD	CLEANUP DISPOSAL FACT SHEET HAZ WASTE INVESTIGATION IR	001 002 003 004 007 008 009 010 011 012 013	B2-B - BECHTEL NATIONAL  SW02082321 IMAGED SDNS_005
N00245 / 000806	MISC NONE 00005	07-14-1998 04-29-1998 NONE 10.4	NAVSTA SAN DIEGO RAB MEMBERS			APRIL 29, 1998, RAB MEETING MINUTES	ADMIN RECORD	IR MTG MINS RAB RSE TREATMENT	001 004 007	B2-B - BECHTEL NATIONAL  SW02082321 IMAGED SDNS_005
N00245 / 000037	NONE MISC NONE 00004	08-26-1999 10-28-1998 NONE 10.4	NAVSTA SAN DIEGO RAB RAB MEMBERS			OCTOBER 28, 1998 RESTORATION ADVISORY BOARD MEETING MINUTES	ADMIN RECORD	LF MTG MINS PCB RAB RSE	001 002 003 004 005 006 007 008 009 010 011 012 013	B2-B - BECHTEL NATIONAL  SW02082301 IMAGED SDNS_002

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location
Record Type	Record Date	Author		FRC Access. No.
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.
N00245 / 000142	12-01-1999	NAVSTA SAN DIEGO	FACT SHEET NO. 8 - ENVIRONMENTAL CLEANUP PROGRAM (PORTION OF MAILING LIST IS CONFIDENTIAL)	
NONE	09-01-1999		ADMIN RECORD CONFIDENTIAL	001 B2-B - BECHTEL NATIONAL
MISC	NONE		FACT SHEET HAZ WASTE	002
NONE	10.6	PUBLIC INTEREST	IRP	003
00012			RAB	004 SW02082304
				007 IMAGED
				008 SDNS_005
				009
				010
				011
				012
				013
				020
N00245 / 000223	03-06-2001	ESQUIRE DEPOSITION SERVICES	STENOGRAPHER TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING (SEE AR #221 - MEETING MINUTES)	001 B2-B - BECHTEL NATIONAL
CTO-013/0004	10-25-2000		ADMIN RECORD INFO REPOSITORY	002
MM	00013		FS	003
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION	GW	004 SW02082308
00018			LF	007 IMAGED
			MTG MINS	008 SDNS_003
			MW	
			RAB	
			RI	
			SOIL	
			WATER	
			WELLS	
				014
				015
				016
				017
				018
				019
				020

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.			Prc. Date		Author Affil.		Subject		Classification		Keywords		Sites		Location	
Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Record Date	CTO No.	EPA Cat. #	Author	Recipient	STENOGRAPHER PRODUCED MEETING MINUTES FOR REMEDIAL PROJECT MANAGER'S MEETING	ADMIN RECORD INFO REPOSITORY	ARAR DSMOA FS GW MTG MINS MW PA PAH RAB REMOVAL RI ROD RSE SI SOIL SWMU VOC WELLS	001 002 003 004 007 009 010 011 013 014 015 BLDG. 154	B2-B - BECHTEL NATIONAL SW02082308 IMAGED SDNS_003			
N00245 / 000222	NONE			03-05-2001	10-26-2000	NONE		NAVFAC - SOUTHWEST DIVISION								
NONE	MM															
NONE																
00047																
N00245 / 000282	NONE			01-24-2002	10-30-2001	NONE	LEE & ASSOCIATES N. LEE NAVFAC - SOUTHWEST DIVISION		TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD INFO REPOSITORY	CLOSURE FS GW MTG MINS MW ORDNANCE RAB RI ROD SARA SOIL UXO WELLS	001 002 002A 003 004 005 006 007 008 010 011 012 013 015	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_005			
NONE	MM															
NONE																
00041																

UIC No. / Rec. No.	Pr. Date	Author Affil.	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
Doc. Control No.	Record Date	Author	Recipient	Recipient Affil.					
Record Type	CTO No.	Recipient							
Contr./Guid. No.	EPA Cat. #								
Approx. # Pages									
ND0245 / 000564	04-19-2002	LEE & ASSOCIATES			STENOGRAPHER TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING	ADMIN RECORD INFO REPOSITORY	CANCER CEQA GW HAZ WASTE MTG MINS MW PCB RAB RI SEDIMENTS SOIL SOIL BORING WATER WELLS WORK PLAN	004 007 010 013 BLDG. 261	B2-B - BECHTEL NATIONAL
NONE	01-30-2002	N. LEE							
MM	NONE	NAVFAC - SOUTHWEST DIVISION							SW02082316 IMAGED
NONE									SDNS_011
00070		D. BELTON							
ND0245 / 000638	05-01-2002	BECHTEL ENVIRONMENTAL, INC.			FACT SHEET NO. 9 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH AND SPANISH) (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL) (SEE AR #451 - PROOF OF PUBLICATION)	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	ARSENIC CERCLA FACT SHEET FS GW HAZ WASTE IRP METALS ORDNANCE PCB RAB REMEDIAL ACTIO RI SOIL SVOC TCRA UXO VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 020	B2-B - BECHTEL NATIONAL SW02082317 IMAGED SDNS_011
CTO-0013/0068	04-01-2002								
MISC	00013								
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION							
00022									

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date Record Date CTO No. EPA Cat. #	Author Affil. Author Recipient Affil. Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000451	CTO-0013/0071	MISC	N68711-95-D-7526	00004	05-08-2002 05-03-2002 00013	BECHTEL ENVIRONMENTAL, INC.  NAVFAC - SOUTHWEST DIVISION	PROOF OF PUBLICATION, IN STAR-NEWS, OF FACT SHEET NO. 9 - ENVIRONMENTAL CLEANUP PROGRAM (SEE AR #638 - FACT SHEET NO. 9)	ADMIN RECORD INFO REPOSITORY	ASBESTOS FACT SHEET FS GW IRP METALS ORDNANCE PCB PIM PUBNOT RAB REMEDIAL ACTIO REMOVAL RI RSE SOIL SVOC TCRA VOC	001 002 002A 003 004 005 006 007 008 009 010 011 012 013 020	B2-B - BECHTEL NATIONAL  SW02082314 IMAGED SDNS_011
N00245 / 000913	NONE	MISC	NONE	00001	09-25-2002 07-18-2002 NONE	EL MEXICANO GENERAL PUBLIC	PUBLIC NOTICE (IN SPANISH) FOR RESTORATION ADVISORY BOARD MEETING HELD 31 JULY 2002	ADMIN RECORD	ERA GW MONITORING MTG MINS PROPOSED PLAN PUBNOT RAB RI	004 007 011 012	P3-C - BECHTEL NATIONAL  SW03061201 IMAGED SDNS_012





UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #		Recipient						CD No.	
N00245 / 000919		10-16-2002		SAN DIEGO		NOTICE INVITING PUBLIC COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	COMMENTS GW HAZ MAT NFA PROPOSED PLAN REMOVAL RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL	
	NONE	08-29-2002		UNION-TRIBUNE							
MISC		NONE		GENERAL PUBLIC						SW03061201	IMAGED
NONE										SDNS_012	
00002											
N00245 / 000903		09-11-2002		THE STAR-NEWS		PROOF OF PUBLICATION OF PROPOSED PLAN RELEASED FOR PUBLIC COMMENT FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS ERA GW NFA PA PROPOSED PLAN PUBNOT REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC VOC WATER	005 007 011 012	P3-C - BECHTEL NATIONAL	
	NONE	08-30-2002		GENERAL PUBLIC						SW03061201	IMAGED
MISC		NONE								SDNS_012	
NONE											
00003											
N00245 / 000918		10-16-2002		EL MEXICANO		PUBLIC NOTICE COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	CLOSURE COMMENTS GW HAZ MAT NFA PROPOSED PLAN PUBNOT RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL	
	NONE	08-31-2002		GENERAL PUBLIC						SW03061201	IMAGED
MISC		NONE								SDNS_012	
NONE											
00001											

UIC No. / Rec. No.	Prc. Date	Author Affil.	Location				
Doc. Control No.	Record Date	Author	FRG Access. No.				
Record Type	CTO No.	Recipient Affil.	Box No.				
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.				
Approx. # Pages		Subject					
N00245 / 000915	09-25-2002	LEE & ASSOCIATES	TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 31 JULY 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	ARAR	002	P3-C - BECHTEL NATIONAL
NONE	09-16-2002	N. LEE			CANCER	002A	
MM	NONE	NAVFAC - SOUTHWEST DIVISION			CAP	002G	
NONE					CHARACTERIZATI	004	SW03061201
00069					COPC	005	IMAGED
					DUST	007	SDNS_012
					ERA	011	
					GW	012	
					LF		
					METALS		
					MONITORING		
					MTBE		
					MTG MINS		
					MW		
					NCP		
					NFA		
					NPL		
					PAH		
					PCB		
					PETROLEUM		
					PRG		
					PROPOSED PLAN		
					PUBNOT		
					RAB		
					RISK		
					ROD		
					SOIL		
					WELLS		
					GW	005	P3-C - BECHTEL NATIONAL
					NFA	007	
					PROPOSED PLAN	011	SW03061201
					SOIL	012	IMAGED
					WELLS		SDNS_012

N00245 / 000927	11-05-2002	DTSC - CYPRESS	NOTIFICATION THAT DTSC DOES NOT CONCUR WITH THE NO FURTHER ACTION DESIGNATION FOR THE FORMER SEWAGE TREATMENT PLANT SITE IN THE PROPOSED PLAN AND ASKS THAT THE DESIGNATION BE REMOVED UNTIL THE SITE CAN BE INVESTIGATED MORE THOROUGHLY (SEE AR #912 - PLAN)	ADMIN RECORD	INFO	REPOSITORY	005	P3-C - BECHTEL NATIONAL
NONE	09-16-2002	J. SCANDURA					007	
LTR	NONE	NAVSTA SAN DIEGO					011	SW03061201
NONE		D. KEMP					012	IMAGED
00004								SDNS_012





UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000945	SWDIV SER	01-22-2003	01-16-2003	NAVFAAC - SOUTHWEST DIVISION	NAVFAAC - SOUTHWEST DIVISION	RESPONSE TO DTSC LETTER OF 23 OCTOBER 2002 REGARDING NAVY'S PROPOSED PLAN FOR THE FORMER SEWAGE TREATMENT PLANT - THE DON WILL DO FURTHER EVALUATION OF GROUNDWATER AT SITE AS A GOOD FAITH RESPONSE TO DTSC CONCERNS (SEE AR #929 - 23 OCTOBER LETTER)	ADMIN RECORD	CANCER GW METALS RI ROD SOIL	007	P3-C - BECHTEL NATIONAL	
N00245 / 000962	NONE	04-24-2003	01-29-2003	LEE AND ASSOCIATES	NAVFAAC - SOUTHWEST DIVISION	29 JANUARY 2003 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES AND AGENDA - INCLUDES ELECTRONIC VERSION ON DISK	ADMIN RECORD	MTG MINS RAB	002 003 004 005 007 011 012	P3-C - BECHTEL NATIONAL	
N00245 / 001033	NONE	12-18-2003	04-30-2003	NAVFAAC - SOUTHWEST DIVISION		PUBLIC NOTICE FOR 30 APRIL 2003 RESTORATION ADVISORY BOARD (RAB) MEETING - INCLUDES AGENDA, PUBLIC NOTICE, AND 01/29/03 MEETING MINUTES	ADMIN RECORD	MTG MINS PAH	003 005 007 011 012	CHOICE IMAGING SOLUTIONS	
N00245 / 001007	NONE	11-11-2003	07-22-2003	RAB		TECHNICAL ASSISTANCE FOR PUBLIC PARTICIPATION (TAPP) APPLICATION	ADMIN RECORD				
N00245 / 001074	SWDIV SER.	06-21-2004	06-01-2004	NAVFAAC - SOUTHWEST DIVISION	NAVFAAC - SOUTHWEST DIVISION	DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTONI	ADMIN RECORD	BTEX PAH PCB PLAN SVOC TPH VOC	001 002 003 004 007 005 007 011 012	CHOICE IMAGING SOLUTIONS	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location
Record Type	Record Date	Author		FRC Access. No.
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.
N00245 / 001080	08-23-2004	RWQCB	NO COMMENTS ON THE NO FURTHER	005
NONE	08-22-2004	L. WALSH	ACTION RECORD OF DECISION (ROD)	007
MISC	NONE	NAVFAC -	ADMIN RECORD	011
NONE		SOUTHWEST	COMMENTS	012
00001		DIVISION		
		D. BELTON		

Total Estimated Record Page Count: 938

Total - Administrative Records: 36

((SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or SUBJECT Like "TRC" Or SUBJECT Like "FACT SHEET" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESTORATION ADVISORY BOARD" Or SUBJECT Like "RAB" Or SUBJECT Like "PUBLIC" Or SUBJECT Like "NEWS" Or SUBJECT Like "RECORD OF DECISION" Or SUBJECT Like "ROD" Or SUBJECT Like "RESPONSIVENESS SUMMARY" Or SUBJECT Like "LOCAL REUSE AUTHORITY" Or SUBJECT Like "LRA" Or SUBJECT Like "WORKSHOP" Or SUBJECT Like "NOTICE" Or SUBJECT Like "NEWSPAPER" Or SUBJECT Like "HEARING" Or SUBJECT Like "LOCAL REDEVELOPMENT AUTHORITY") AND UIC NUMBER=N00245

No Keywords

Sites=007

No Classification







NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

PUBLIC PARTICIPATION DOCUMENTS FOR SITE 11

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location
Record Type	Contr./Guid. No.	Record Date	Author	Recipient						FRC Access. No. Box No. CD No.
Approx. # Pages	EPA Cat. #	CTO No.								
N00245 / 000576		08-02-1996	NAVSTA SAN DIEGO			FACT SHEET #5 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH & SPANISH), IRP HELPS DRIVE THE CLEANUP ACTIVITY (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	BASIN DPDO HAZ WASTE PUBNOT SALVAGE YARD	001 002 003 004 005 007 008 009 010 011 012 013	B2-B - BECHTEL NATIONAL  SW02082316 IMAGED SDNS_005
DATA		03-01-1996								
NONE		NONE								
00014		10.6								
N00245 / 000714		07-30-1997	NAVSTA SAN DIEGO			FACT SHEET NO. 6 - ENVIRONMENTAL CLEANUP PROGRAM (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	PCB RAB	001 002 003 004 005 006 007 008 009 011 012	B2-B - BECHTEL NATIONAL  SW02082318 IMAGED SDNS_008
MISC		07-01-1997								
NONE		NONE								
00022		10.6								





UIC No. / Rec. No.	Prc. Date	Author Affil.	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
Doc. Control No.	Record Type	Record Date	CTO No.	Apprx. # Pages	EPA Cat. #	Recipient			
N00245 / 000222	03-05-2001								
NONE	10-26-2000								
MM	NONE		NAVFAC - SOUTHWEST DIVISION		STENOGRAPHER PRODUCED MEETING MINUTES FOR REMEDIAL PROJECT MANAGER'S MEETING	ADMIN RECORD INFO REPOSITORY	ARAR DSMOA FS GW MTG MINS MV PA PAH RAB REMOVAL RI ROD RSE SI SOIL SWMU VOC WELLS	001 002 003 004 007 009 010 011 013 014 015 BLDG. 154	B2-B - BECHTEL NATIONAL
NONE									
00047									SW02082308 IMAGED SDNS_003
N00245 / 000282	01-24-2002								
NONE	10-30-2001								
MM	NONE		LEE & ASSOCIATES N. LEE		TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD INFO REPOSITORY	CLOSURE FS GW MTG MINS MV ORDNANCE RAB RI ROD SARA SOIL UXO WELLS	001 002 002A 003 004 005 006 007 008 010 011 012 013 015	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_005
NONE									
00041									

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.			Prc. Date	Author Affil.	Subject		Classification	Keywords	Sites	Location
Doc. Control No.	Record Type	Contr./Guid. No.	Record Date	Author	Recipient					FRC Access. No.
Approx. # Pages	EPA Cat. #									Box No. CD No.
N00245 / 000638	05-01-2002	05-01-2002	04-01-2002	BECHTEL	ENVIRONMENTAL, INC.	FACT SHEET NO. 9 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH AND SPANISH) (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL) [SEE AR #451 - PROOF OF PUBLICATION]	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	ARSENIC CERCLA FACT SHEET FS GW HAZ WASTE IRP METALS ORDNANCE PCB RAB REMEDIAL ACTIO RI SOIL SVOC TCRA UXO VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 020	B2-B - BECHTEL NATIONAL  SW02082317 IMAGED SDNS_011
N00245 / 000308	06-12-2002	04-24-2002	NONE	LEE & ASSOCIATES N. LEE NAVAFAC - SOUTHWEST DIVISION	NAVAFAC - SOUTHWEST DIVISION	TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING OF 24 APRIL 2002 W/ AGENDA (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD INFO REPOSITORY	CANCER DQO GW METALS MTG MINS ORDNANCE PCB RAB RI SOIL SOIL BORING SVOC SWMU TCRA TPH VOC WELLS	002 003 004 006 009 010 011 012 BLDG. 321	B2-B - BECHTEL NATIONAL  SW02082311 IMAGED SDNS_011

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location			
Record Type	Record Date	Author		FRC Access. No.			
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.			
Classification	Keywords	Sites					
N00245 / 000451	05-08-2002	BECHTEL ENVIRONMENTAL, INC.	PROOF OF PUBLICATION, IN STAR-NEWS, OF FACT SHEET NO. 9 - ENVIRONMENTAL CLEANUP PROGRAM (SEE AR #638 - FACT SHEET NO. 9)	ADMIN RECORD INFO REPOSITORY	ASBESTOS FACT SHEET FS	001 002 002A	B2-B - BECHTEL NATIONAL
CTO-0013/0071	05-03-2002				GW	003	SW02082314
MISC	00013				IRP	004	IMAGED
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION			METALS	005	SDNS_011
00004					ORDNANCE	006	
					PCB	007	
					PIM	008	
					PUBNOT	009	
					RAB	010	
					REMEDIAL ACTIO	011	
					REMOVAL	012	
					RI	013	
					RSE	020	
					SOIL		
					SVOC		
					TCRA		
					VOC		
N00245 / 000913	09-25-2002	EL MEXICANO	PUBLIC NOTICE (IN SPANISH) FOR RESTORATION ADVISORY BOARD MEETING HELD 31 JULY 2002	ADMIN RECORD	ERA	004	P3-C - BECHTEL NATIONAL
NONE	07-18-2002				GW	007	
MISC	NONE	GENERAL PUBLIC			MONITORING	011	
NONE					MTG MINS	012	SW03061201
00001					PROPOSED PLAN		IMAGED
					PUBNOT		SDNS_012
					RAB		
					RI		

Monday, September 13, 2004

This Administrative Record (AR) Index includes references to documents which cite bibliography sources. These bibliographic citations are considered to be part of this AR but may not be cited separately in the index.

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
N00245 / 000914		09-25-2002	THE STAR NEWS			PUBLIC NOTICE FOR RESTORATION ADVISORY BOARD MEETING HELD 31 JULY 2002	ADMIN RECORD	ERA	004	P3-C - BECHTEL NATIONAL
NONE		07-19-2002						GW	007	
MISC		NONE	GENERAL PUBLIC					HAZ WASTE	011	
NONE								IRP	012	SW03061201 IMAGED
00001								MONITORING		SDNS_012
								PROPOSED PLAN		
								PUBNOT		
								RAB		
N00245 / 000902		08-23-2002	NAVFAC -			TRANSMITTAL OF SECTION 5 OF THE	ADMIN RECORD	ARSENIC	005	P3-C - BECHTEL NATIONAL
CTO-0190/0151 &		08-15-2002	SOUTHWEST			DRAFT ECOLOGICAL RISK ASSESSMENT		ERA	007	
SWDIV SER		00190	DIVISION			FOR THE FORMER SEWAGE TREATMENT		GW	011	
5SEN.DB/174			D. BELTON			PLANT AND THE PROPOSED PLAN FOR		LANDFILL	012	SW03061201 IMAGED
MISC			DTSC - CYPRESS			THE ADMIRAL BAKER GOLF COURSE		METALS		SDNS_012
N68711-92-D-4670			D. BAUTISTA			LANDFILL, FORMER SEWAGE TREATMENT		NFA		
00134						PLANT, FRENCH DRAIN, AND BRINSER		PA		
						STREET PARKING AREA		PAH		
								PCB		
								PIM		
								PROPOSED PLAN		
								REMEDIAL ACTIO		
								RI		
								ROD		
								RSE		
								SI		
								SOIL		
								SVOC		
								TPH		
								VOC		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location			
Record Type	Record Date	Author		FRC Access. No.			
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.			
Classification	Keywords	Sites					
N00246 / 000919	10-16-2002	SAN DIEGO UNION-TRIBUNE	NOTICE INVITING PUBLIC COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	COMMENTS GW HAZ MAT NFA PROPOSED PLAN REMOVAL RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	08-29-2002	NONE					
MISC			GENERAL PUBLIC				
NONE							
00002							
N00245 / 000903	09-11-2002	THE STAR-NEWS	PROOF OF PUBLICATION OF PROPOSED PLAN RELEASED FOR PUBLIC COMMENT FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS ERA GW NFA PA PROPOSED PLAN PUBNOT REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC VOC WATER	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	08-30-2002	NONE					
MISC			GENERAL PUBLIC				
NONE							
00003							
N00246 / 000918	10-16-2002	EL MEXICANO	PUBLIC NOTICE COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	CLOSURE COMMENTS GW HAZ MAT NFA PROPOSED PLAN PUBNOT RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	08-31-2002	NONE					
MISC			GENERAL PUBLIC				
NONE							
00001							

Monday, September 13, 2004

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N00245 / 000915	NONE	MM	NONE	00069	09-25-2002 09-16-2002 NONE	LEE & ASSOCIATES N. LEE NAVFAC - SOUTHWEST DIVISION	TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 31 JULY 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	ARAR CANCER CAP CHARACTERIZATI COPC DUST ERA GW LF METALS MONITORING MTBE MTG MINS MW NCP NFA NPL PAH PCB PETROLEUM PRG PROPOSED PLAN PUBNOT RAB RISK ROD SOIL WELLS	002 002A 002G 004 005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
N00245 / 000927	NONE LTR NONE 00004				11-05-2002 09-16-2002 NONE	DTSC - CYPRESS J. SCANDURA NAVSTA SAN DIEGO D. KEMP	NOTIFICATION THAT DTSC DOES NOT CONCUR WITH THE NO FURTHER ACTION DESIGNATION FOR THE FORMER SEWAGE TREATMENT PLANT SITE IN THE PROPOSED PLAN AND ASKS THAT THE DESIGNATION BE REMOVED UNTIL THE SITE CAN BE INVESTIGATED MORE THOROUGHLY (SEE AR #912 - PLAN)	ADMIN RECORD INFO REPOSITORY	GW NFA PROPOSED PLAN SOIL WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012

Monday, September 13, 2004

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Contr./Guid. No.	CTO No.	Recipient Affil.	Box No.				
Approx. # Pages	EPA Cat. #	Recipient	CD No.				
		Subject	Classification	Keywords			
				Sites			
N00245 / 000384	10-08-2002	BECHTEL ENVIRONMENTAL, INC.	MATERIALS FROM THE PUBLIC MEETING REGARDING THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA W/ATTACHMENTS	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COMMENTS PIM PROPOSED PLAN	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
CTO-0013/0121	09-18-2002						
MISC	00013						
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION					
00031							
N00245 / 000912	09-17-2002	BECHTEL ENVIRONMENTAL, INC.	PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA - NAVY	ADMIN RECORD INFO REPOSITORY	AIR ARSENIC BGS CANCER GW LF	005 007 011 012 BLDG. 3053	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
CTO-0013/0122	09-26-2002						
PLAN	00013						
N68711-95-D-7526		NAVFAC - SOUTHWEST DIVISION					
00017							

Monday, September 13, 2004

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UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000923	NONE	10-24-2002		LEE & ASSOCIATES		TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON-CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL	
MISC		10-07-2002	NONE	N. LEE							
NONE				NAVFAC - SOUTHWEST DIVISION						SW03061201 IMAGED SDNS_012	
00004											
N00245 / 000928	NONE	11-05-2002		RAB MEMBER		LETTER FROM A RESTORATION ADVISORY BOARD MEMBER EXPRESSING APPROVAL OF THE CLEANUP EFFORTS AT THE ACTIVITY	ADMIN RECORD	PIM RAB	001 002	P3-C - BECHTEL NATIONAL	
LTR		10-18-2002	NONE	C. WOEMPNER							
NONE				NAVSTA SAN DIEGO						SW03061201 IMAGED SDNS_012	
00003				D. KEMP							
N00245 / 000935	NONE	12-02-2002		LEE & ASSOCIATES		TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 30 OCTOBER 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	DATA GW METALS MONITORING MTG MINS NFA PRG PROPOSED PLAN QA QC RAB UST WELLS	005 007 008 011 012 BLDG. 3 BLDG. 4 BLDG. 5 BLDG. 6 BLDG. 7	P3-C - BECHTEL NATIONAL	
MM		11-19-2002	NONE	N. LEE						SW03061202 IMAGED SDNS_012	
NONE				NAVFAC - SOUTHWEST DIVISION							
00046											
N00245 / 000947	NONE	03-20-2003		NAVFAC - SOUTHWEST DIVISION		LETTER IN RESPONSE TO DTSC'S LETTER OF 16 SEPTEMBER 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP SITE 7	ADMIN RECORD INFO REPOSITORY		005 007 011 012	P3-C - BECHTEL NATIONAL	
SWDIV SER		01-14-2003	NONE	D. KEMP						SW03061202 IMAGED SDNS_012	
N46MS/0048				DTSC - CYPRESS							
LTR				J. SCANDURA							
NONE											
00004											

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	
		Classification	Keywords
			Sites
N00245 / 000962	04-24-2003	LEE AND ASSOCIATES	ADMIN RECORD
NONE	01-29-2003	N. LEE	MTG MINS
MM	NONE	NAV/FAC - SOUTHWEST DIVISION	RAB
NONE			002
00102			003
			004
			005
			007
			011
			012
			SUB-SITE 2A
N00245 / 001033	12-18-2003	PUBLIC NOTICE FOR 30 APRIL 2003 RESTORATION ADVISORY BOARD (RAB) MEETING - INCLUDES AGENDA, PUBLIC NOTICE, AND 01/29/03 MEETING MINUTES	ADMIN RECORD
NONE	04-30-2003		MTG MINS
MISC	NONE	NAV/FAC - SOUTHWEST DIVISION	PAH
NONE			003
00010			005
			007
			011
			012
N00245 / 001074	06-21-2004	DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTON	ADMIN RECORD
SWDIV SER. 5SEN,DB/149	06-01-2004		BTEX
PLAN	NONE	NAV/FAC - SOUTHWEST DIVISION	PAH
NONE			PCB
00200			PLAN
			SVOC
			TPH
			VOC
N00245 / 001080	08-23-2004	RWQCB	ADMIN RECORD
NONE	08-22-2004	L. WALSH	COMMENTS
MISC	NONE	NAV/FAC - SOUTHWEST DIVISION	005
NONE			007
00001		D. BELTON	011
			012
			SOUTHWEST DIVISION

Monday, September 13, 2004

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UIC No. / Rec. No.		Prc. Date		Author Affil.		Location	
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Contr./Guid. No.	Approx. # Pages	CTO No.	Recipient	Recipient Affil.			CD No.
		EPA Cat. #			Subject	Classification	Sites
						Keywords	

**Total Estimated Record Page Count: 1,000**

**Total - Administrative Records: 29**

((SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or SUBJECT Like "TRC" Or SUBJECT Like "FACT SHEET" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESTORATION ADVISORY BOARD" Or SUBJECT Like "RAB" Or SUBJECT Like "PUBLIC" Or SUBJECT Like "NEWS" Or SUBJECT Like "RECORD OF DECISION" Or SUBJECT Like "ROD" Or SUBJECT Like "RESPONSIVENESS SUMMARY" Or SUBJECT Like "LOCAL REUSE AUTHORITY" Or SUBJECT Like "LRA" Or SUBJECT Like "WORKSHOP" Or SUBJECT Like "NOTICE" Or SUBJECT Like "NEWSPAPER" Or SUBJECT Like "HEARING" Or SUBJECT Like "LOCAL REDEVELOPMENT AUTHORITY")) AND (UIC NUMBER=N00245'

No Keywords

Sites=011

No Classification









NAVAL STATION SAN DIEGO

DRAFT ADMINISTRATIVE RECORD FILE INDEX - UPDATE (SORTED BY RECORD DATE/RECORD NUMBER)

PUBLIC PARTICIPATION DOCUMENTS FOR SITE 12

UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient	Subject	Classification	Keywords	Sites	Location
N00245 / 000285					04-05-1995	01-24-1994	JACOBS ENGINEERING	L. ALLEN	NAVAFAC - SOUTHWEST DIVISION	PRELIMINARY SITE ASSESSMENT AND EMERGENCY REMOVAL OF FREE FLOATING PRODUCT (REF TO DOC NO N00245.000539)	ADMIN RECORD	SA	008 012	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_003
RPT					00271									
N68711-89-D-9296					00.0									
00445														
N00245 / 000378					08-07-1995	05-31-1995				MAY 31, 1995 RAB MEETING MINUTES	ADMIN RECORD	BASIN MTG MINS RAB SALVAGE YARD	001 002 003 007 008 012	B2-B - BECHTEL NATIONAL SW02082312 IMAGED SDNS_004
MM					NONE									
NONE					10.4									
00006														
N00245 / 000361					07-25-1995	06-28-1995				JUNE 28, 1995 RAB MEETING MINUTES, AGENDA, HANDOUTS ON SITES 3 AND 12 REVISED DRAFT RULES OF OPERATION & DEPT. OF DEFENSE MEMORANDUM FOR RAB MEMBERS	ADMIN RECORD	MTG MINS RAB SALVAGE YARD	003 012	B2-B - BECHTEL NATIONAL SW02082312 IMAGED SDNS_006
MM					00072									
N68711-92-D-4670					10.4									
00059														
N00245 / 000428					10-31-1995	08-30-1995	NAVAFAC - SOUTHWEST DIVISION			AUGUST 30, 1995 RESTORATION ADVISORY BOARD MEETING MINUTES AND AGENDA	ADMIN RECORD	BASIN MTG MINS RAB SALVAGE YARD	001 002 003 007 008 012	B2-B - BECHTEL NATIONAL SW02082314 IMAGED SDNS_004
MM					NONE									
NONE					10.3									
00011														

Monday, September 13, 2004

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Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages		Subject	
		Classification	Keywords
			Sites
N00246 / 000610	04-01-1996 09-27-1995	NAVFAC - SOUTHWEST DIVISION	SEPTEMBER 27, 1995 RAB MEETING MINUTES WITH HANDOUT AND AGENDA FOR OCTOBER 25, 1995 MEETING
MM NONE 00040	NONE 10.4	RAB MEMBERS	ADMIN RECORD MTG MINS 012 B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_004
N00245 / 000492	04-01-1996 11-01-1995	NAVFAC - SOUTHWEST DIVISION	FACT SHEET NO.3 - ENVIRONMENTAL CLEANUP PROGRAM, IN ENGLISH AND SPANISH WITH MAILING LIST (PORTION OF MAILING LIST IS CONFIDENTIAL)
MISC NONE 00011	NONE 10.7	COMMUNITY MEMBERS	ADMIN RECORD CONFIDENTIAL FACT SHEET PUBNOT SALVAGE YARD 003 012 B2-B - BECHTEL NATIONAL SW02082314 IMAGED SDNS_004
N00245 / 000493	04-01-1996 01-01-1996	NAVFAC - SOUTHWEST DIVISION	FACT SHEET NO.4 - ENVIRONMENTAL CLEANUP PROGRAM, IN ENGLISH AND SPANISH WITH MAILING LIST (PORTION OF MAILING LIST IS CONFIDENTIAL)
MISC NONE 00011	NONE 10.7	COMMUNITY MEMBERS	ADMIN RECORD CONFIDENTIAL FACT SHEET MAILING LST PUBNOT SALVAGE YARD 003 012 B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_004
N00245 / 000364	03-07-2002 02-28-1996	NAVSTA SAN DIEGO	MINUTES OF RESTORATION ADVISORY BOARD MEETING
MM NONE 00007	NONE	NAVFAC - SOUTHWEST DIVISION	ADMIN RECORD AOPC AST FUEL GW IRP MTG MINS MW PIM RAB RSE SOIL SOLVENTS WELLS WORK PLAN 001 002 003 004 007 008 012 013 017 B2-B - BECHTEL NATIONAL SW02082312 IMAGED SDNS_004

Monday, September 13, 2004

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UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject		Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.						FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #			Recipient						CD No.	
N00245 / 000576		08-02-1996		NAVSTA SAN DIEGO		FACT SHEET #5 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH & SPANISH), IRP HELPS DRIVE THE CLEANUP ACTIVITY (PORTION OF MAILING LIST IS CONFIDENTIAL)		ADMIN RECORD CONFIDENTIAL	BASIN DPDO HAZ WASTE PUBNOT SALVAGE YARD	001 002 003 004 005 007 008 009 010 011 012 013	B2-B - BECHTEL NATIONAL	
	DATA	03-01-1996										
	NONE	NONE			PUBLIC INTEREST						SW02082316	IMAGED
	00014	10.6									SDNS_005	
N00245 / 000602		08-02-1996		NAVSTA SAN DIEGO		MARCH 27, 1996, RAB MEETING MINUTES AND AGENDA.		ADMIN RECORD	IRP MTG MINS RAB	001 002 012	B2-B - BECHTEL NATIONAL	
MM		NONE										
NONE		03.6		MEMBERS							SW02082316	IMAGED
00009											SDNS_004	
N00245 / 000523		04-26-1996		NAVFAC - SOUTHWEST DIVISION		FACT SHEET #1 - ENVIRONMENTAL CLEANUP PROGRAM, REMOVAL ACTION, ANNOUNCING PUBLIC REVIEW PERIOD FOR THE SITE 12, PROPOSED CLEANUP ACTION		ADMIN RECORD	FACT SHEET PUBNOT	012	B2-B - BECHTEL NATIONAL	
MISC		04-01-1996									000-00-0000	
NONE		NONE		COMMUNITY MEMBERS							SW02082315	IMAGED
00002		10.6									SDNS_005	
N00245 / 000521		04-26-1996		THE COMPASS		NEWSPAPER ARTICLE "SCRUBBIN' THE DIRTY DECKS" AT SITE 12		ADMIN RECORD	PUBNOT	012	B2-B - BECHTEL NATIONAL	
MISC		NONE		COMMUNITY MEMBERS							000-00-0000	
NONE		10.6									SW02082315	IMAGED
00001											SDNS_004	
N00245 / 000547		05-30-1996		DTSC LONG BEACH		COMMENTS ON THE FACT SHEET FOR THE TIME CRITICAL REMOVAL ACTION MEMORANDUM/REMOVAL ACTION WORK PLAN FOR SITE 12		ADMIN RECORD	COMMENTS	012	B2-B - BECHTEL NATIONAL	
LTR		04-19-1996		J.M. JIMENEZ								
NONE		NONE		NAVSTA SAN DIEGO							SW02082316	IMAGED
00007		10.1		T.L. MORLEY							SDNS_004	

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Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.
Classification	Keywords	Sites		
N00245 / 000524	04-26-1996 04-20-1996	THE STAR NEWS	NEWSPAPER ARTICLE "PUBLIC NOTICE ANNOUNCING PUBLIC REVIEW AND COMMENT PERIOD FOR THE SITE 12 PRE-FINAL TIME CRITICAL REMOVAL ACTION MEMORANDUM/WORK PLAN"	MISSING @ SWDIV PUBNOT TCRA 012 SOUTHWEST DIVISION
MISC NONE 00001	NONE 10.6	COMMUNITY MEMBERS		
N00245 / 000531	05-14-1996 04-21-1996	STAR NEWS	NEWSPAPER ARTICLE "PUBLIC NOTICE FOR PROPOSED CLEANUP ACTION AT NAVAL STATION OPEN FOR PUBLIC REVIEW" SITE 12	ADMIN RECORD PUBNOT 012 B2-B - BECHTEL NATIONAL 000-00-0000 SW02082315 IMAGED SDNS_005
MISC NONE 00001	NONE 10.3	COMMUNITY MEMBERS		
N00245 / 000603	06-02-1996 04-24-1996	NAVSTA SAN DIEGO	APRIL 24, 1996, RAB MEETING MINUTES AND AGENDA (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD IRP MTG MINS RAB 012 SW02082316 IMAGED SDNS_004
MM NONE 00023	NONE 03.6	MEMBERS		
N00245 / 000544	05-24-1996 05-10-1996	DTSC LONG BEACH	REPOSIT OF THE DRAFT CALIFORNIA ENVIRONMENTAL QUALITY ACT NEGATIVE DECLARATION AT LIBRARY FOR PUBLIC REVIEW FOR HAZARDOUS WASTE CLEANUP ACTIVITIES AT SITE 12	ADMIN RECORD HAZ WASTE 012 SW02082316 IMAGED SDNS_005
LTR NONE 00057	NONE 02.7	S. LOWE NAVSTA SAN DIEGO K. HIGH		
N00245 / 000575	01-15-2002 05-10-1996	DTSC, LONG BEACH, CA S. LOWE NAVFAC - SOUTHWEST DIVISION	PUBLIC NOTICE: DRAFT CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) NEGATIVE DECLARATION FOR THE PROPOSED TIME CRITICAL REMOVAL ACTION	ADMIN RECORD CEQA PUBNOT TCRA 012 SW02082316 IMAGED SDNS_005
MISC NONE 00002	NONE			
N00245 / 000577	08-02-1996 05-11-1996	STAR NEWS	NEWSPAPER ARTICLE: "PUBLIC NOTICE, PUBLIC COMMENT PERIOD OPENS FOR PROPOSED CEQA NEGATIVE DECLARATION."	ADMIN RECORD COMMENTS IRP PUBNOT 012 B2-B - BECHTEL NATIONAL SW02082316 IMAGED SDNS_005
MISC NONE 00001	NONE 10.6	PUBLIC INTEREST		

Monday, September 13, 2004

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UIC No. / Rec. No.	Doc. Control No.	Record Type	Contr./Guid. No.	Approx. # Pages	Prc. Date	Record Date	Author Affil.	Author	Recipient Affil.	Recipient	Subject	Classification	Keywords	Sites	Location
															FRC Access. No. Box No. CD No.
N00245 / 000548					05-30-1996	05-14-1996	NAVSTA SAN DIEGO				RESPONSE TO APRIL 19, 1996 COMMENTS ON THE FACT SHEET REMOVAL ACTION MEMORANDUM REMOVAL ACTION WORK PLAN FOR SITE 12	ADMIN RECORD	ACTMEMO RESPONSE	012	B2-B - BECHTEL NATIONAL
LTR					NONE		L.L. MC LAUGHLIN								SW02082316 IMAGED
NONE					10.1		DTSC LONG BEACH								SDNS_004
00001							J. JIMINEZ								B2-B - BECHTEL NATIONAL
N00245 / 000386					03-19-2002	06-26-1996	NAVFAC - SOUTHWEST DIVISION				INFORMATION MATERIALS FROM THE RESTORATION ADVISORY BOARD MEETING HELD ON 26 JUNE 1996 - INCLUDES MEETING MINUTES, PRELIMINARY FINAL TIME-CRITICAL REMOVAL ACTION MEMORANDUM/REMEDIAL ACTION PLAN AND SIGN-IN SHEETS (SEE AR #885 - DRAFT AGENDA (REV. 1))	ADMIN RECORD CONFIDENTIAL	MTG MINS PAH PCB SOIL	003 012	SW02082313 IMAGED SDNS_008
MM					00116		NAVFAC - SOUTHWEST DIVISION								
N68711-92-D-4670															
00026															
N00245 / 000674					02-05-1997	07-31-1996	NAVSTA SAN DIEGO				31 JULY 1996 RESTORATION ADVISORY BOARD MEETING MINUTES (SEE AR #885 - DRAFT MEETING MINUTES, REV. 1)	ADMIN RECORD	ACTMEMO BASIN MTG MINS RAB REMOVAL	001 003 012	B2-B - BECHTEL NATIONAL
MM					00072		COMMUNITY								SW02082317 IMAGED SDNS_005
NONE					10.4										B2-B - BECHTEL NATIONAL
00008															
N00245 / 000738					09-30-1997	08-28-1996	NAVSTA SAN DIEGO				AUGUST 28, 1996 RESTORATION ADVISORY BOARD MEETING AGENDA, SIGN-IN SHEETS AND HANDOUTS	ADMIN RECORD	CLEANUP DISPOSAL GW MTG MINS PCB PUB. PARTICIPAT RAB REMOVAL	001 003 012	SW02082319 IMAGED SDNS_005
MISC					NONE										
NONE					10.3		COMMITTEE MEMBERS								
00020															

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location			
Record Type	Record Date	Author		FRC Access. No.			
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.			
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.			
N00245 / 000714	07-30-1997 07-01-1997	NAVSTA SAN DIEGO	FACT SHEET NO. 6 - ENVIRONMENTAL CLEANUP PROGRAM (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	PCB RAB	001 002 003 004 005 006 007 008 009 011 012	B2-B - BECHTEL NATIONAL
MISC NONE 00022	NONE 10.6	PUBLIC					SW02082318 IMAGED SDNS_008
N00245 / 000761	03-04-1998 10-29-1997	NAVSTA SAN DIEGO	OCTOBER 29, 1997 RAB MEETING MINUTES, AGENDA, VARIOUS OVERHEADS, AND SIGN-IN SHEETS (PORTION OF MAILING LIST IS CONFIDENTIAL)	ADMIN RECORD CONFIDENTIAL	MTG MINS PUB. PARTICIPAT RAB	001 003 004 008	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082320 IMAGED SDNS_008
MM NONE 00017	NONE 10.4	RAB MEMBERS			SALVAGE YARD	012	
N00245 / 000807	07-14-1998 04-01-1998	NAVSTA SAN DIEGO	FACT SHEET NO. 7 - ENVIRONMENTAL CLEANUP PROGRAM	ADMIN RECORD	CLEANUP DISPOSAL	001 002	B2-B - BECHTEL NATIONAL
MISC NONE 00009	NONE 01.1	ENVIRONMENTAL PR PUBLIC			FACT SHEET HAZ WASTE INVESTIGATION IR	003 004 007 008 009 010 011 012 013	SW02082321 IMAGED SDNS_005

UIC No. / Rec. No.		Prc. Date		Author Affil.		Subject	Classification	Keywords	Sites	Location	
Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000037	NONE	08-26-1999		NAVSTA SAN		OCTOBER 28, 1998 RESTORATION	ADMIN RECORD	LF	001	B2-B - BECHTEL	
		10-28-1998		DIEGO RAB		ADVISORY BOARD MEETING MINUTES		MTG MINS	002	NATIONAL	
	MISC	NONE						PCB	003		
	NONE	10.4		RAB MEMBERS				RAB	004	SW02082301	
	00004							RSE	005	IMAGED	
									006	SDNS_002	
									007		
									008		
									009		
									010		
									011		
									012		
									013		
N00245 / 000894	NONE	01-01-2000		NAVSTA SAN		AGENDA FOR 28 OCTOBER 1998	CONFIDENTIAL	GW	002	P3-C - BECHTEL	
		10-28-1998		DIEGO		RESTORATION ADVISORY BOARD	MISSING @	MTG MINS	006	NATIONAL	
	MISC	NONE		T. MORLEY		MEETING INCLUDES MINUTES OF 30	SWDIV	RAB	012		
	NONE	10.3		DISTRIBUTION		SEPTEMBER 1998 RAB MEETING.		REMOVAL	013	SW03061201	
	00012					HANDOUTS AND MAILING LIST PORTIONS		SOIL	020	IMAGED	
						OF WHICH IS CONFIDENTIAL		WELLS	022	SDNS_012	
									023		
									024		
N00245 / 000142	NONE	12-01-1999		NAVSTA SAN		FACT SHEET NO. 8 - ENVIRONMENTAL	ADMIN RECORD	FACT SHEET	001	B2-B - BECHTEL	
		09-01-1999		DIEGO		CLEANUP PROGRAM (PORTION OF	CONFIDENTIAL	HAZ WASTE	002	NATIONAL	
	MISC	NONE				MAILING LIST IS CONFIDENTIAL)		IRP	003		
	NONE	10.6		PUBLIC INTEREST				RAB	004	SW02082304	
	00012								007	IMAGED	
									008	SDNS_005	
									009		
									010		
									011		
									012		
									013		
									020		

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location		
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Contr./Guild. No.	CTO No.	Recipient Affil.		Box No.		
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.		
N00245 / 000223	03-06-2001	ESQUIRE DEPOSITION SERVICES	STENOGRAPHER TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING (SEE AR #221 - MEETING MINUTES)	ADMIN RECORD INFO REPOSITORY	FS 001 GW 002 LF 003 MTG MINS 004 MMW 007 RAB 008 RI 010 SOIL 012 WATER 013 WELLS 014 015 016 017 018 019 020	B2-B - BECHTEL NATIONAL   <

Monday, September 13, 2004

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Approx. # Pages	EPA Cat. #	CTO No.								CD No.
N00245 / 000282	01-24-2002	10-30-2001	LEE & ASSOCIATES	LEE & ASSOCIATES	NAVAFAC - SOUTHWEST DIVISION	TRANSCRIPT OF RESTORATION ADVISORY BOARD MEETING (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD INFO REPOSITORY	CLOSURE FS GW MTG MINS MW ORDNANCE RAB RI ROD SARA SOIL UXO WELLS	001 002 002A 003 004 005 006 007 008 010 011 012 013 015	B2-B - BECHTEL NATIONAL 000-00-0000 SW02082310 IMAGED SDNS_005
N00245 / 000638	05-01-2002	04-01-2002	BECHTEL ENVIRONMENTAL, INC.	BECHTEL ENVIRONMENTAL, INC.	NAVAFAC - SOUTHWEST DIVISION	FACT SHEET NO. 9 - ENVIRONMENTAL CLEANUP PROGRAM (IN ENGLISH AND SPANISH) (INCLUDES MAILING LIST PARTS OF WHICH SHOULD BE CONSIDERED CONFIDENTIAL) [SEE AR #451 - PROOF OF PUBLICATION]	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	ARSENIC CERCLA FACT SHEET FS GW HAZ WASTE IRP METALS ORDNANCE PCB RAB REMEDIAL ACTIO RI SOIL SVOC TCRA UXO VOC	001 002 003 004 005 006 007 008 009 010 011 012 013 020	B2-B - BECHTEL NATIONAL SW02082317 IMAGED SDNS_011





UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Location
Record Type	Record Date	Author		FRC Access. No.
Contr./Guid. No.	CTO No.	Recipient Affil.		Box No.
Approx. # Pages	EPA Cat. #	Recipient	Subject	CD No.
Classification	Keywords	Sites		
N00245 / 000914	09-25-2002	THE STAR NEWS	PUBLIC NOTICE FOR RESTORATION ADVISORY BOARD MEETING HELD 31 JULY 2002	ADMIN RECORD
NONE	07-19-2002			ERA 004
MISC	NONE	GENERAL PUBLIC		GW 007
NONE				HAZ WASTE 011
00001				IRP 012
				MONITORING
				PROPOSED PLAN
				PUBNOT
				RAB
N00245 / 000902	08-23-2002	NAVFAC -	TRANSMITTAL OF SECTION 5 OF THE	ADMIN RECORD
CTO-0190/0151 &	08-15-2002	SOUTHWEST	DRAFT ECOLOGICAL RISK ASSESSMENT	ARSENIC 005
SWDIV SER	00190	DIVISION	FOR THE FORMER SEWAGE TREATMENT	ERA 007
5SEN.DB/174		D. BELTON	PLANT AND THE PROPOSED PLAN FOR	GW 011
MISC		DTSC - CYPRESS	THE ADMIRAL BAKER GOLF COURSE	LANDFILL 012
N68711-92-D-4670		D. BAUTISTA	LANDFILL, FORMER SEWAGE TREATMENT	METALS
00134			PLANT, FRENCH DRAIN, AND BRINSER	NFA
			STREET PARKING AREA	PA
				PAH
				PCB
				PIM
				PROPOSED PLAN
				REMEDIAL ACTIO
				RI
				ROD
				RSE
				SI
				SOIL
				SVOC
				TPH
				VOC

Monday, September 13, 2004

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Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient Affil.					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000919	NONE	10-16-2002	08-29-2002	SAN DIEGO UNION-TRIBUNE	GENERAL PUBLIC	NOTICE INVITING PUBLIC COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	COMMENTS GW HAZ MAT NFA PROPOSED PLAN REMOVAL RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012	
N00245 / 000903	NONE	09-11-2002	08-30-2002	THE STAR-NEWS	GENERAL PUBLIC	PROOF OF PUBLICATION OF PROPOSED PLAN RELEASED FOR PUBLIC COMMENT FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA	ADMIN RECORD	COMMENTS ERA GW NFA PA PROPOSED PLAN PUBNOT REMEDIAL ACTIO RI ROD RSE SI SOIL SVOC VOC WATER	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012	
N00245 / 000918	NONE	10-16-2002	08-31-2002	EL MEXICANO	GENERAL PUBLIC	PUBLIC NOTICE COMMENT ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSER STREET PARKING AREA WITH INVITATION TO PRESENTATION AND DISCUSSION MEETING ON 18 SEPTEMBER	ADMIN RECORD	CLOSURE COMMENTS GW HAZ MAT NFA PROPOSED PLAN PUBNOT RISK SOIL	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012	

UIC No. / Rec. No.	Prc. Date	Author Affil.	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
Doc. Control No.	Record Date	Author					
Record Type	CTO No.	Recipient Affil.					
Contr./Guid. No.	EPA Cat. #	Recipient					
Approx. # Pages							
N00245 / 000915	09-25-2002	LEE & ASSOCIATES	TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 31 JULY 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	ARAR CANCER CAP CHARACTERIZATI COPC DUST ERA GW LF METALS MONITORING MTBE MTG MINS MW NCP NFA NPL PAH PCB PETROLEUM PRG PROPOSED PLAN PUBNOT RAB RISK ROD SOIL WELLS	002 002A 002G 004 005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	09-16-2002	N. LEE					
MM	NONE	NAVEAC - SOUTHWEST DIVISION					
NONE							
00069							
N00245 / 000927	11-05-2002	DTSC - CYPRESS	NOTIFICATION THAT DTSC DOES NOT CONCUR WITH THE NO FURTHER ACTION DESIGNATION FOR THE FORMER SEWAGE TREATMENT PLANT SITE IN THE PROPOSED PLAN AND ASKS THAT THE DESIGNATION BE REMOVED UNTIL THE SITE CAN BE INVESTIGATED MORE THOROUGHLY (SEE AR #912 - PLAN)	ADMIN RECORD INFO REPOSITORY	GW NFA PROPOSED PLAN SOIL WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	09-16-2002	J. SCANDURA					
LTR	NONE	NAVSTA SAN DIEGO					
NONE		D. KEMP					
00004							

Monday, September 13, 2004

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Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000384		10-08-2002		BECHTEL		MATERIALS FROM THE PUBLIC MEETING REGARDING THE PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSEY STREET PARKING AREA W/ ATTACHMENTS	ADMIN RECORD CONFIDENTIAL INFO REPOSITORY	COMMENTS PIM PROPOSED PLAN	005 007 011 012	P3-C - BECHTEL NATIONAL	
CTO-0013/0121		09-18-2002		ENVIRONMENTAL, INC.							
MISC		00013									
N68711-95-D-7526				NAVFAC -							
00031				SOUTHWEST DIVISION						SW03061201 IMAGED SDNS_012	
N00245 / 000912		09-17-2002		BECHTEL		PROPOSED PLAN FOR THE ADMIRAL BAKER GOLF COURSE, FORMER SEWAGE TREATMENT PLANT, FRENCH DRAIN, AND BRINSEY STREET PARKING AREA - NAVY PROPOSES NO FURTHER ACTION (WRITTEN IN BOTH ENGLISH AND SPANISH)	ADMIN RECORD INFO REPOSITORY	AIR ARSENIC BGS CANCER GW LF METALS NCP NFA PA PAH PCB PROPOSED PLAN REMEDIAL ACTIO RI ROD RSE SI SOIL SOLVENTS SVOC TPH VOC WATER	005 007 011 012 BLDG. 3053	P3-C - BECHTEL NATIONAL	
CTO-0013/0122		09-26-2002		ENVIRONMENTAL, INC.							
PLAN		00013									
N68711-95-D-7526				NAVFAC -							
00017				SOUTHWEST DIVISION						SW03061201 IMAGED SDNS_012	

UIC No. / Rec. No.	Doc. Control No.	Prc. Date	Author Affil.	Author	Recipient Affil.	Subject	Classification	Keywords	Sites	Location FRC Access. No. Box No. CD No.
Record Type	Record Date	CTO No.	Recipient							
Contr./Guid. No.	EPA Cat. #									
Approx. # Pages										
N00245 / 000923	10-24-2002	10-07-2002	LEE & ASSOCIATES			TRANSCRIPT OF STATEMENT ON 18 SEPTEMBER 2002 BY DOUG BAUTISTA OF THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL ON THE NON- CONCURRENCE BY HIS AGENCY ON THE PROPOSED PLAN FOR NO FURTHER ACTION AT THE FORMER SEWAGE TREATMENT PLANT (INCLUDES FLOPPY DISK VERSION)	ADMIN RECORD	DATA GW MW NFA PROPOSED PLAN WELLS	005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE	NONE		N. LEE							
MISC			NAVAFAC - SOUTHWEST DIVISION							
NONE										
00004										
N00245 / 000928	11-05-2002	10-18-2002	RAB MEMBER C. WOEM/PIER			LETTER FROM A RESTORATION ADVISORY BOARD MEMBER EXPRESSING APPROVAL OF THE CLEANUP EFFORTS AT THE ACTIVITY	ADMIN RECORD	PIM RAB	001 002 004 005 007 011 012	P3-C - BECHTEL NATIONAL SW03061201 IMAGED SDNS_012
NONE			NAVSTA SAN DIEGO							
LTR			D. KEMP							
NONE										
00003										
N00245 / 000935	12-02-2002	11-19-2002	LEE & ASSOCIATES			TRANSCRIPT OF RESTORATION ADVISORY BOARD MINUTES OF MEETING HELD 30 OCTOBER 2002 - INCLUDES AGENDA & FLOPPY DISK VERSION	ADMIN RECORD	DATA GW METALS MONITORING MTG MINS NFA PRG QA PROPOSED PLAN QA QC RAB UST WELLS	005 007 008 011 012 BLDG. 3 BLDG. 4 BLDG. 5 BLDG. 6 BLDG. 7	P3-C - BECHTEL NATIONAL SW03061202 IMAGED SDNS_012
NONE			N. LEE							
MM			NAVAFAC - SOUTHWEST DIVISION							
NONE										
00046										
N00245 / 000947	03-20-2003	01-14-2003	NAVAFAC - SOUTHWEST DIVISION			LETTER IN RESPONSE TO DTSC'S LETTER OF 16 SEPTEMBER 2002 REGARDING THE NAVY'S PROPOSED PLAN FOR IRP SITE 7	ADMIN RECORD INFO REPOSITORY		005 007 011 012	P3-C - BECHTEL NATIONAL SW03061202 IMAGED SDNS_012
NONE			D. KEMP							
NONE			DTSC - CYPRESS							
00004			J. SCANDURA							

Monday, September 13, 2004

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Doc. Control No.	Record Type	Record Date	CTO No.	Author	Recipient					FRC Access. No.	Box No.
Constr./Guid. No.	Approx. # Pages	EPA Cat. #								CD No.	
N00245 / 000962	NONE	04-24-2003		LEE AND ASSOCIATES		29 JANUARY 2003 RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES AND AGENDA - INCLUDES ELECTRONIC VERSION ON DISK	ADMIN RECORD	MTG MINS RAB	002 003 004 005 007 011 012	P3-C - BECHTEL NATIONAL	
	MM	01-29-2003	NONE	N. LEE							
NONE				NAVFAC - SOUTHWEST DIVISION						SW03070301	IMAGED
00102										SDNS_012	
N00245 / 001033	NONE	12-18-2003				PUBLIC NOTICE FOR 30 APRIL 2003 RESTORATION ADVISORY BOARD (RAB) MEETING - INCLUDES AGENDA, PUBLIC NOTICE, AND 01/29/03 MEETING MINUTES	ADMIN RECORD	MTG MINS PAH	003 005 007 011 012	CHOICE IMAGING SOLUTIONS	
	MISC	04-30-2003	NONE	NAVFAC - SOUTHWEST DIVISION							
NONE										SW04071501	
00010											
N00245 / 001074	NONE	06-21-2004				DRAFT REMEDIAL ACTION PLAN/RECORD OF DECISION (ROD) (NO ACTION), INCLUDES SWDIV TRANSMITTAL LETTER BY D. BELTONI	ADMIN RECORD	BTEX PAH PCB PLAN SVOC TPH VOC	005 007 011 012	CHOICE IMAGING SOLUTIONS	
SWDIV SER.		06-01-2004	NONE	NAVFAC - SOUTHWEST DIVISION							
5SEN.DB/149											
PLAN											
NONE											
00200											
N00245 / 001080	NONE	08-23-2004		RWQCB		NO COMMENTS ON THE NO FURTHER ACTION RECORD OF DECISION (ROD)	ADMIN RECORD	COMMENTS	005 007 011 012	SOUTHWEST DIVISION	
	MISC	08-22-2004	NONE	L. WALSH							
NONE				NAVFAC - SOUTHWEST DIVISION							
00001				D. BELTON							

UIC No. / Rec. No.	Proc. Date	Author Affil.	Location
Doc. Control No.	Record Date	Author	FRC Access. No.
Record Type	CTO No.	Recipient Affil.	Box No.
Contr./Guid. No.	EPA Cat. #	Recipient	CD No.
Approx. # Pages	Subject	Classification	Keywords
Sites			

**Total Estimated Record Page Count: 1,622**

**Total - Administrative Records: 54**

((SUBJECT Like "TECHNICAL REVIEW COMMITTEE" Or SUBJECT Like "TRC" Or SUBJECT Like "FACT SHEET" Or SUBJECT Like "PROPOSED PLAN" Or SUBJECT Like "RESTORATION ADVISORY BOARD" Or SUBJECT Like "RAB" Or SUBJECT Like "PUBLIC" Or SUBJECT Like "NEWS" Or SUBJECT Like "RECORD OF DECISION" Or SUBJECT Like "ROD" Or SUBJECT Like "RESPONSIVENESS SUMMARY" Or SUBJECT Like "LOCAL REUSE AUTHORITY" Or SUBJECT Like "LRA" Or SUBJECT Like "WORKSHOP" Or SUBJECT Like "NOTICE" Or SUBJECT Like "NEWSPAPER" Or SUBJECT Like "HEARING" Or SUBJECT Like "LOCAL REDEVELOPMENT AUTHORITY") AND UIC NUMBER=N00245'  
 No Keywords  
 Sites=012  
 No Classification

## **ATTACHMENT C**

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### **TRANSCRIPT FROM PUBLIC MEETING**



PROPOSED PLAN FOR  
NAVAL STATION SAN DIEGO  
IR SITES 5, 7, 11 and 12

WEDNESDAY, SEPTEMBER 18, 2002

NATIONAL CITY, CALIFORNIA

LEE & ASSOCIATES

1 NATIONAL CITY, CA., WED., SEPTEMBER 18, 2002

2

3 MR. BAUTISTA: My name is Doug Bautista. I'm  
4 with the Department of Toxic Substances Control in  
5 Cypress, California. I am the designated project  
6 manager for Naval Station.

7 My statement is the Department of Toxic  
8 Substances Control has not concurred on the Navy's  
9 proposed plan for no further action on Site 7. The  
10 Navy issued the proposed plan without providing the  
11 Department of Toxic Substances Control sufficient  
12 opportunity to review, comment and concur with the  
13 release of this proposed plan. There were technical  
14 issues raised during the remedial investigation that  
15 have not been resolved regarding human health and  
16 ecological risk at the site.

17 The Department of Toxic Substances  
18 Control's main concern is there is not enough  
19 groundwater data to demonstrate that the site has  
20 not impacted groundwater or is not posing human and  
21 ecological risk.

22 The Naval Station's basis for no further  
23 action is from a single sampling event of three  
24 wells in 1992 and another sampling event at four  
25 separate and distinct wells in 1998. The standard

1 procedure is to install monitoring wells in proper  
2 locations around the site and sample those wells  
3 once every three months for at least one year.

4           The agencies were also not provided the  
5 opportunity to verify, prior to the public release,  
6 that the public notification and participation  
7 efforts complied with the applicable state law. To  
8 ensure early and meaningful public participation  
9 opportunities, the Department of Toxic Substances  
10 Control routinely ensures outreach documents are  
11 released at or before the start of a public comments  
12 period. This proposed plan was mailed ten days  
13 after the comment period started and five days short  
14 of the community meeting, thereby reducing available  
15 time for the public review and participation.

16           On September 16, 2002 the Department of  
17 Toxic Substances Control sent a letter to the  
18 commanding officer of Naval Station San Diego  
19 requesting that Naval Station remove the proposed no  
20 further action designation from Site 7 until such  
21 time that it is determined by federal and state  
22 regulatory agencies that contamination in  
23 groundwater does not pose a threat to human health  
24 and aquatic environments.

25

1 STATE OF CALIFORNIA )

2 : ss

3 COUNTY OF SAN DIEGO )

4

5 I, Nancy A. Lee, CSR No. 3870, do hereby  
6 certify that I reported in shorthand the above  
7 proceedings on Wednesday, September 18, 2002, at the  
8 Holiday Inn, 700 National City Boulevard, in the  
9 City of National City, County of San Diego, State of  
10 California; and I do further certify that the above  
11 and foregoing pages numbered 1 to 3, inclusive,  
12 contain a true and correct transcript of all of said  
13 proceedings.

14 Dated: October 7, 2002.

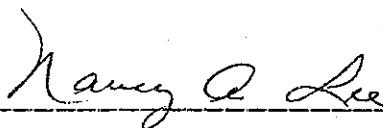
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NANCY A. LEE

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